SAN DIEGO COUNTY CEQA GUIDELINES

As Amended by the

Board of Supervisors

on

May 21, 1997

Article 1. General

Incorporate Article 1 of the State CEQA Guidelines and add:

1.1 Authority

The following procedures are adopted by the Board of Supervisors of the County of San Diego pursuant to Section 21082 of the California Public Resources Code (Environmental Quality Act of 1970, "CEQA"), and Sections 15000, 15020 and 15022 of Title 14 of the California Administrative Code, Guidelines for Implementation of the California Environmental Quality Act of 1970 (hereinafter referred to as the "State CEQA Guidelines" as amended).

1.2 Purpose

The purpose of these procedures is to provide objectives, criteria and specific procedures for the orderly evaluation of projects and the preparation of environmental documents pursuant to the CEQA and State CEQA Guidelines.

1.3 Relationships of the County Procedures to State CEQA Guidelines

The County Guidelines are intended to supplement the State CEQA Guidelines for practical application to specific projects approved or undertaken by the County of San Diego. The following procedures, therefore, do not replace or supplant the State CEQA Guidelines, but are to be used in conjunction with them. All definitions and requirements of the State CEQA Guidelines are included and made part of these procedures by this reference. If the application of any procedure contained in the County Guidelines conflicts with any provision of the State CEQA Guidelines, the provision of the State CEQA Guidelines shall control. A copy of the current State CEQA Guidelines is included in Attachment A.

1.4 Severability of Provisions

If any section, subsection, sentence, clause, or phrase of these procedures is for any reason held to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining portions of these procedures, it being hereby expressly declared that these procedures and each section, subsection, sentence, clause, and phrase hereof would have been prepared, proposed, adopted, approved, or ratified irrespective of the fact that any one or more other sections, subsections, sentences, clauses, or phrases be declared invalid or unconstitutional.

1.5 Department Procedures

County agencies and departments may adopt administrative procedures consistent with these Guidelines to facilitate the orderly processing of applications and projects within each such agency or department.

1.6 Concurrent Processing

The County of San Diego shall integrate the requirements of the CEQA with planning and environmental review procedures otherwise required by law or by administrative practice so that all such procedures to the maximum feasible extent, run concurrently, rather than consecutively.

Article 2. General Responsibilities

Incorporate Article 2 of the State CEQA Guidelines and add:

2.1 General

The County is responsible for the adequacy of its environmental documents. No County department, officer or decision-maker shall knowingly release a deficient document hoping that public comment will correct defects in the document.

2.2 Approving Authority

The approving authority shall perform such functions as may be required by the CEQA or by the Board of Supervisors, including the following:

1. Review public testimony regarding the environmental impacts of proposed projects, and review and consider final Environmental Impact Reports (EIRs) or Negative Declarations (NDs) prior to approving projects.

2. Approve NDs where proposed projects will not have significant impact on the environment.

3. Certify that EIRs have been completed in compliance with the CEQA and that the information contained therein has been reviewed and considered prior to approving projects.

4. Determine when environmental impacts may be significant and determine mitigating measures, or modifications of the project, that should be made conditions of approval.

5. As a Responsible Agency, consider the EIR or ND prepared by the Lead Agency and make a determination on whether and how to approve the project involved.

6. Request additional information in cases where it appears an EIR cannot be certified without that information.

7. Make findings as required by Section 15091 and Section 15092 of the State CEQA Guidelines.

2.3 Planning and Environmental Review Board (PERB)

In addition to its role as an approving authority where so authorized by County ordinances, for specific "public projects", the PERB may, upon referral by the Director of Planning and Land Use, conduct public hearings/meetings upon which to base recommendations for approving NDs, certifying EIRs, identifying which impacts may be significant and what mitigating measures should be made conditions of approval. Public testimony shall be considered in the PERB's deliberations but responses in the final EIR shall only be provided for written comments received prior to the close of the public review period.

2.4 Processing Agency

A County agency, department or other division responsible for processing a permit or similar entitlement, or for initiating a County project (the “Processing Agency”) shall also be responsible for the functions listed below. The Department of Planning and Land Use shall act as the Processing Agency when requested to do so by another County agency, department or division. The Processing Agency shall:

1. Assess the potential environmental significance of projects proposed to be undertaken or approved by the County of San Diego that are subject to the requirements of the CEQA, the State CEQA Guidelines and these Guidelines.

2. Prepare environmental documents and recommendations to the approving authority for projects subject to the CEQA, the State CEQA Guidelines and these Guidelines.

3. Review environmental documents submitted by Lead Agencies to the County of San Diego for comment.

4. Notify the public of the availability for review of environmental documents by legal notice in a newspaper of general circulation for a minimum public review of 15 days, and mail PERB or other approving authority agendas on environmental matters to interested parties.

5. Transmit a Notice of Completion to the Office of Planning and Research when a draft EIR is accepted for public review.

6. Review and comment on Notices of Preparation, proposed NDs, and draft EIRs sent to the County as a Responsible Agency by Lead Agencies.

Article 3. Authorities Granted to Public Agencies by the CEQA

Incorporate Article 3 of the State CEQA Guidelines and add:

Fees:

The County, through ordinances governing processing costs for the corresponding project application(s), shall fully recover all reasonable professional and administrative expenses from project applicants.

Article 4. Lead Agency

Incorporate Article 4 of the State CEQA Guidelines.

Article 5. Preliminary Review of Project and Conduct of Initial Study

Incorporate Article 5 of the State CEQA Guidelines and add:

5.1 Pre-Intake Assistance

The Department of Planning and Land Use shall offer Pre-Intake Assistance to applicants for projects for which that Department is the reviewing staff. It is strongly recommended that persons desirous of filing applications for land development permits or approvals participate in Pre-Intake Assistance. Once an applicant has participated in Pre-Intake Assistance, the information provided and preliminary determinations should, in most cases, be considered to be valid for one year. Such assistance should include:

- The applicant will provide brief project description and preliminary resource constraint information;
- Staff will determine current planning and zoning;
- Staff will usually visit the site;
- A meeting will be held between the applicant and staff concerning the above, together with preliminary information about pertinent County requirements (including environmental requirements for application submittal), compatibility with the surrounding area, findings required for the necessary permit or approval, and information or requirements concerning other County departments;
- A checklist covering application submittal requirements will be provided; and

- The project will be referred to any applicable community planning or sponsor group.

5.2 General

Upon accepting an application or initiating a project, the Processing Agency will determine whether or not a proposed action is subject to the environmental impact evaluation process according to Article 5. If it is not exempt, an Initial Study will be prepared to determine whether an EIR is required. The applicant will receive written instructions and application for Initial Study forms from the Processing Agency to be used in submitting information for the Initial Study. He/she shall complete the forms and submit a complete package to the Processing Agency.

1. Within the first seven days following receipt, the application will be assigned to an analyst. The analyst shall read the application, check for completeness, review information including information developed during the Pre-Intake Assistance process, and develop a recommendation to the Director of the Processing Agency as to whether a ND or an EIR should be prepared, and whether sufficient information has been submitted to enable that determination.

2. Whenever an analyst still has a question about the recommendation, the analyst will contact the applicant to discuss the project and his/her questions.

Article 6. ND Process

Incorporate Article 6 of the State CEQA Guidelines and add:

6.1 General

A ND shall be prepared for a project which could potentially have a significant effect on the environment, but which the approving authority finds on the basis of an Initial Study will not have a significant effect on the environment.

6.2 Sufficiency of Information to Determine Whether ND or EIR is Appropriate

The Director of the Processing Agency shall, within 30 days from the date the application was received, determine whether sufficient information has been submitted to enable the Director to determine whether to recommend to the decision-making body that an EIR or a ND be prepared. In making this determination, the Director shall review the Initial Study, review the information developed during Pre-Intake Assistance, and obtain such further information from the applicant, any applicable community planning or sponsor group, representatives from other County departments.

6.3 Incomplete Application (Extended Initial Study)

If after review of an Initial Study, the Director's recommendation is that the application is incomplete because inadequate technical information is available in order to determine potential environmental impacts, the following procedures will be in effect:

1. The Director shall immediately deliver the written determination to the applicant. The Director may call the applicant and discuss the recommendations over the telephone or invite the applicant into the office for a meeting.

2. The applicant may agree to prepare and submit the additional information, according to a time schedule which the applicant and staff agree to. Any resubmittal shall be judged for completeness within 30 days of resubmittal, and the Director's determination immediately communicated to the applicant.

3. If the applicant disagrees with the Director's recommendation, the applicant may, within ten days of the date of the Director's recommendation, file a written appeal to the Planning Commission. The Commission shall, within 60 calendar days of the date of receipt of the written appeal, issue a written decision whether to affirm, overturn or modify the Director's determination. The Commission's decision shall be final.

4. If additional studies are to be performed, they shall be performed either by County staff or by a consultant approved by the County pursuant to Attachment B.

5. When the Processing Agency finds that sufficient information has been presented and that the application is otherwise complete, it shall then, within 30 days from the date of such determination of completeness, determine whether to recommend that a ND or EIR be prepared. A ND may be recommended because either the project will not have any significant impacts as originally proposed or the applicant has modified the original request to incorporate measures into the project such that it now will not have any significant impacts.

6.4 Notice of Determination

After the County makes a decision to carry out or approve the project the Clerk of the Board of Supervisors or other responsible authority shall file a Notice of Determination with the County Clerk. The Notice of Determination shall include the decision of the agency to approve or disapprove the project, the determination of the agency whether the project will have a significant effect on the environment, and a statement that no EIR has been prepared pursuant to the provision of the CEQA.

Article 7. EIR Process

Incorporate Article 7 of the State CEQA Guidelines and add:

7.1 General

If the Initial Study shows that the project could have significant environment effect, the applicant will be notified in writing of the determination. The following procedures apply to the review and evaluation of EIRs. (It may sometimes happen that an applicant waives the Initial Studies stage. With the exception of Section 7.2, the procedures remain the same.)

7.2 Appeal of Determination that EIR or ND be Prepared

If the application is one over which a decision-maker other than the Director has jurisdiction, and the applicant or an interested person disagrees with the Director's recommendation that an EIR or a ND be prepared, they may, within ten days of the Director's recommendation, appeal in writing to the decision-maker with jurisdiction over the application. (The appeal shall be to the Planning Commission in cases where the Commission is required by law to consider and make a recommendation on an application over which the Board of Supervisors has jurisdiction.) The decision-maker shall consider the appeal, with or without holding a noticed public hearing on the request as it deems appropriate. The decision-maker may determine whether to affirm, overturn or modify the Director's recommendation. The decision-maker's determination on the appeal shall be final.

If the application is one over which the Director has jurisdiction and the applicant or other interested person disagrees with the Director's determination, they may within

ten days of the Director's determination, request in writing that the matter be considered by the Hearing Officer designated pursuant to Section 392.2 of the San Diego County Administrative Code. The Hearing Officer shall then consider the matter, holding a noticed public hearing if the Hearing Officer deems it appropriate, and make a recommendation to the Director. The Director, upon receipt of the recommendation of the Hearing Officer, shall determine to either reaffirm or modify the original determination.

7.3 Notice of Preparation

If there are any other local or State agencies (Responsible Agencies) from which a permit for the project or a particular aspect of the project must be received, a Notice of Preparation (NOP) shall be prepared in accordance with State CEQA Guidelines requirements and directions from the Department of Planning and Land Use.

1. The Processing Agency preparing the draft EIR or a qualified consultant pursuant to Attachment B shall prepare a draft NOP and a list of Responsible Agencies and other interested parties, including the sponsor/community planning group(s).

2. If prepared by an environmental consultant, that consultant shall submit to the Processing Agency the draft NOP distribution list, one set of stamped envelopes for certified mail and either the fee for EIR Administrative Action or the required deposit for processing a draft EIR if not already paid.

3. The submitted material will be reviewed by the Processing Agency for adequacy within two weeks from the date of submittal. If additional agencies or interested parties are identified or changes to the text of the NOP are needed, the preparing department or environmental consultant shall supply the supplemental material to the Processing Agency upon notice that it is required.

4. When an acceptable NOP is available, the Processing Agency will distribute copies.
5. The Processing Agency shall provide copies of all responses received to the preparing department or environmental consultant and be responsible for convening any requested meetings.

7.4 Preparation and Review of Draft EIRs

A draft EIR must reflect the independent judgment of the County staff.

1. If no appeal or the requests remain valid after appeal considerations, the Processing Agency or a certified private consultant pursuant to Attachment B shall, after the agreement pursuant to Attachment E has been signed by all parties, then prepare the draft EIR.

2. If an environmental consultant is involved, it shall submit the draft EIR to the Processing Agency for staff review.

3. Within seven days of draft EIR intake, an analyst shall be assigned to review the submittal. If the document does not meet State or County standards pursuant to these Guidelines, does not adequately address all issues, and/or does not cover all areas identified in the NOP or responses to the NOP, then the analyst shall send a letter outlining the needed items within 30 days of EIR intake.

4. The Processing Agency or environmental consultant shall incorporate the additional information into the draft EIR and resubmit along with a cover letter indicating where particular items have been addressed in the revised material or why due to a modification of the project design such changes are no longer needed.

5. Once the draft EIR is accepted as adequate for public review, the Processing Agency or the environmental consultant is responsible for providing the number of copies needed for public review and distribution to the decision-makers. Also five copies are to be provided in a package with postage ready for mailing to the sponsor/community planning group(s).

6. The analyst shall cause an advertisement to be placed in a newspaper of general circulation advertising a 30 day or 45 day public review period. An additional 15 days may be required if the State Clearinghouse is involved or if release of the draft EIR occurs such that the sponsor/community planning group(s) does not have at least 2 weeks to review prior to a scheduled meeting for formal action.

7. The public notice shall contain information to the effect that any citizen may request to be notified of any hearing on the project application and be so notified if a request is made.

8. Public review shall start the first day that the newspaper advertisement runs. The Notice of Completion is dated the day of the beginning of public review. The close of the public review period shall be so scheduled as to occur prior to the hearing by the approving authority.

9. The Processing Agency shall mail copies of draft EIRs and legal notices to the Chairpersons of the subregional/community planning groups for all EIRs under consideration in any subregional/community planning area and the date of the public hearing in consideration of such EIRs. Copies of the draft EIR shall be distributed to appropriate branches of the public libraries in the project area and environmental groups, including a copy of the legal notice indicating the duration of the public review period. Interested groups and

citizens who have requested such notification in writing of the availability of the draft EIR will be informed by mail. Copies of the draft EIR will be distributed to public agencies which have jurisdiction by law or special expertise with respect to any environmental effect of the project.

10. The Processing Agency shall transmit a Notice of Completion to the Secretary for Resources of the State of California.

7.5 Preparation of Final EIR

1. The Processing Agency is responsible for the content of the Responses to Public Comments, but may require the environmental consultant to provide any additional information that is needed.

2. The analyst shall prepare the written staff recommendations on major issues, identify any potentially significant impacts and where feasible provide specific mitigating measures. The written recommendations will be transmitted to the applicant and approving authority, according to the docketing deadlines of that body.

3. If PERB is the approving authority, the EIR analyst shall attend the meeting to present a staff report and answer questions as needed.

7.6 Decision on EIR

1. Unless additional time has been required for review by the State or sponsor/community planning group(s) or circumstances otherwise merit, the approving authority shall within 55 days of the beginning of a 30 day and within 70 days of the beginning of a 45 day public review period be scheduled to hear the project. Occasionally, a group or individual will need time to prepare a presentation before the approving authority. At the discretion of the approving authority, the hearing on a specific project can be continued.

2. The findings of significance and mitigability of the approving authority shall be factually documented and attached to the EIR.

3. The board, commission or officer having authority to render a final decision on the proposed action shall certify that the EIR has been completed in compliance with the CEQA and the State CEQA Guidelines and that information contained in the EIR has been reviewed and considered prior to rendering the final decision.

4. If the board, commission or officer having authority to render a final decision approves the project despite the significant non-mitigable environmental impacts the project would cause, the decision-maker must make findings

consistent with Sections 15091 and 15093 of the CEQA Guidelines. Findings that specific economic, social or other considerations make mitigation measures or project alternatives identified in the EIR infeasible, and that benefits of the project outweigh the unavoidable adverse environmental effects, shall be supported by substantial evidence in the record.

-- Substantial evidence includes:

· Facts.

· Reasonable assumptions predicated on facts.

· Expert opinion supported by facts.

Substantial evidence does not include speculation.

-- Specific economic considerations which provide overriding benefits may include, but are not limited to:

· A significant increase in newly created long-term jobs.

· A significant increase in direct revenue to the County.

· Satisfaction of demand for a scarce product that is infeasible to produce at an alternate site where unmitigable environmental impacts can be avoided.

-- Specific social considerations which provide overriding benefits may include, but are not limited to:

· Provision of an essential public facility or service that could not feasibly be provided at an alternate site where unmitigable environmental impacts can be avoided.

-- Other considerations which provide overriding benefits may include but are not limited to:

· Legal considerations such as provisions of local, State or Federal law and court orders.

· Technical considerations which severely limit siting options.

5. Upon final County action on a proposed project, the Clerk of the Board of Supervisors or other responsible authority shall prepare and transmit a Notice of Determination to the County Clerk. Such Notice shall include the

common name of the project; the decision of the County to approve or disapprove the project; a brief description of the project as proposed; the determination whether the project will or will not have a significant effect on the environment; a brief statement of the mitigation measures adopted to reduce the impacts of the project; a statement indicating who prepared the environmental documents and where they may be obtained; and a statement that the environmental documents have been prepared pursuant to the provisions of the CEQA. The Notice of Determination should normally not exceed one page in length.

Article 8. Time Limits

Incorporate Article 8 of the State CEQA Guidelines and add:

In all respects, the County will abide by the time limits specified in Article 8 of the State CEQA Guidelines, and in addition, will make every effort to complete processing of a ND within 90 days after an application is determined to be complete, or within one maximum 90 day extension of this period.

Article 9. Contents of EIRs

Incorporate Article 9 of the State CEQA Guidelines and add:

9.1 Environmental Setting

The environmental setting shall include a description of the physical character of the community. The community's limit shall be defined in the context of a reasonably related geographic area or historically established community identity.

9.2 Environmental Impacts

Potential impacts to the community character shall be addressed in any of the following circumstances:

1. The character of the area is rural or agricultural, and the project request is estate, resort, commercial, industrial, civic or urban residential in nature;

2. The character of the area is estate, and the project request is resort, commercial, industrial, civic or urban residential in nature; or

3. The character of the area is single-family residential within the Urban Limit Line, and the project request is resort, commercial, industrial, civic or multi-family through a Planned Residential Development, Land Use Policy 3.8 or other special use process.

The analysis shall provide the following information:

1. The visual impact evaluating the compatibility of the scale and mass of the proposed project with the surrounding area.

   -- This evaluation shall include information which compares square footage, heights, lot sizes, required earthwork and occupancy rates of other uses in the vicinity of the proposed project.

   -- The architectural style of the structures and their site utilization shall be related to the manner in which surrounding properties have developed.

   -- Landscaping shall be discussed in light of the ability of the plantings to soften the exterior appearance and relative massiveness of the proposed structures.

2. Other physical impacts resulting from the nature of the operations.

   -- This evaluation shall include the type of activities to be conducted, the time of day during which the various operations will occur, the days of the week facility will be used, and the number of people involved.

   -- This information shall define any potential impacts associated with intensification of use of the site as well as providing a baseline for the analysis of noise, traffic, lighting or other related impacts.

3. The potential for subsequent changes to the regional environmental setting resulting from similar additional requests encouraged by the now altered community character or what physical limitations would not permit other property owners from following suit.

9.3 Alternatives to the Proposed Action

In order for the decision-maker to have a reasonable choice, the range of alternatives required in an EIR must meet the following criteria. If the alternative would cause one or more new or different significant environmental effects from those of the project, as proposed by the applicant, these shall be discussed but in less detail.

1. The "no project" alternative must be evaluated in compliance with the State CEQA Guidelines.

2. If there are one or more identified significant, not mitigable impacts, then alternatives must be discussed which reduce each impact individually or collectively to an insignificant level or there must be a discussion of why every alternative would have an equivalent significant impact.

3. If the proposal is a mixed use project, to allow the decision-maker options on the appropriate planning mix, alternatives of the project eliminating various uses or combination of uses must be addressed.

4. If the proposed project is residential, the alternative of reasonably reduced density (20%-50% depending on circumstances) shall be discussed to allow the decision-maker options if the proposed density is not supportable for other than environmental reasons.

5. If the project is commercial, industrial, resort, recreational, civic, major impact facility or other non-residential use, the alternative of reasonably reduced intensity of use (20%-50% reduction in occupancy, floor space, lot coverage or other appropriate approach) shall be discussed to allow the decision-maker options if the proposed use is not supportable for other than environmental reasons.

6. If the sponsor/community planning group has taken an official position to recommend a project modified from that proposed by the applicant, the modified project must also be addressed as an alternative unless it is the same as one of the other required alternatives.

9.4 Growth-Inducing Impact

It must not be assumed that if the project has a potential to foster either economic or population growth that such growth is necessarily beneficial, detrimental or of little significance. The purpose of this section is first to identify elements of the project which could directly or indirectly remove obstacles to growth then to evaluate if such growth will tax existing community services, affect individually or cumulatively the environment or apply pressure prematurely for General Plan Amendments. The analyses can be accomplished in the text, through a checklist or by a combination format.

If physical extensions or expansions of any public services will result from the proposal or annexation to a service district is a requirement for project approval, an analysis shall be made, addressing the following questions. These questions shall be addressed when sewer or water service is expanded by line extensions, plant improvements or annexation; when new wastewater treatment plants or water reservoirs are proposed; when new fire or Sheriff's facilities are needed or district annexation is required; and when off-site road systems are to be upgraded or on-site road construction will complete a major link in the regional circulation system.

1. How much and what type of increase in intensity or use will be provided for by increased service levels?

-- Answer shall provide distances of extensions, areas of expanded services and any capacity increase exceeding that needed for the project itself.

-- Answer shall include upgrading of existing service levels such as shorter response times for fire and police protection.

2. What is the character of the community which will now be served?

-- Answer shall provide discussion of existing land uses.

-- Answer shall identify resources that will be directly impacted by facilities construction and potentially impacted by future development of the areas accommodated by the expanded services.

3. Is the expanded service area within the district's Sphere of Influence?

4. Is the extension/expansion in the district's current Facilities Improvement Program and, if so, when scheduled?

5. How much of this increase is ultimately anticipated by the adopted General Plan?

6. How does this increase relate to the life expectancy of the subregional/community plan?

-- Answer shall include a discussion of whether lack of such service has controlled rate of growth under adopted General Plan and whether now premature buildout is anticipated or are there physical limitations which provide additional controls.

-- Answer shall provide a reasonable buildout rate based on the capital improvement programs for all the various agencies providing service.

-- Answer shall describe how each impacted service will be taxed by the anticipated increased levels of development or what other controlling factors will prevent an increased demand for that service if facilities to accommodate increased development in the area are not available for all other services, including but not limited to all of the above mentioned services plus schools, medical assistance, parks, libraries, commercial centers, public transportation.

7. What capacity is being created beyond that anticipated to be used by development under the adopted General Plan land use designation?

8. What is the potential for requests to extend through General Plan Amendments more intense land use designations into the region because of

the changes in character of the surrounding area resulting from the proposed project?

9.5 Cumulative Impacts

Cumulative impacts shall be discussed when they are significant.

Cumulative impacts may result from a series of projects which when reviewed individually have only incremental impacts and not of a severity to be considered significant but when reviewed regionally, the impact is no longer incremental. The geographic distribution of projects that need to be considered may vary depending on the nature of the regional impact; however, the discussion need not provide as great a detail as is provided of the effects attributable to the project itself.

The Cumulative Impacts section shall include an introductory statement on the project buildout of the community and the anticipated regional impacts (i.e., traffic from source through its freeway distribution to employment and commercial centers) as identified in regional documents such as community plan update EIRs, San Diego Association of Governments forecasts and CalTrans projections. A summary shall be included after discussion of specific impacts, identifying the increment (percentage) of this cumulative impact(s) that the current application contributes to the total and its fair share mitigation to resolution of the regional problems.

1. For biological impacts, selected projects and depth of analysis shall relate to the extent and distribution of the resources being incrementally disturbed or destroyed as identified by professional biologists.

2. For traffic safety hazard/congestion, selected projects and depth of analysis shall relate to regional traffic patterns as established by traffic engineers.

3. For inadequate service levels, selected projects and depth of analysis shall relate to the district's service boundaries or regional services areas if the impact is to a facility serving more than one district.

4. For archaeological/historical impacts, selected projects and depth of analysis shall relate to the type of sites, importance of region historically or archaeologically, and spacial and chronological relationships of sites as established by professional archaeologists.

5. For noise generation, selected projects and depth of analysis shall depend on the sources that contribute to the measurable levels in the area.

6. For flooding and downstream siltation/contamination, selected projects and depth of analysis shall depend on the area contributing to the drainage basin problem as defined by professional engineers.

7. For sand resources, selected projects and depth of analysis shall depend on source-market relationships as established by the economics of haul distances.

8. For groundwater availability/contamination, selected projects and depth of analysis shall relate to the extent of the basin or aquifer being used as a source of water as defined by professional geohydrologists.

9. For growth-induction/community character impacts, selected projects and depth of analysis shall relate to geographic demarcations and/or traditional community identity.

10. The above list is not all inclusive of the possible cumulative impacts that projects may collectively have on an area. For other issues, similar criteria related to the nature of the concern itself shall be used in establishing limits of review; rarely will a circle drawn at an arbitrary distance around a project be appropriate.

Cumulative impacts may also result from the project itself when a number of major issues are individually reduced by mitigation to an insignificant level but when considered collectively create a significant impact on the environmental character of the site and/or surrounding area. Since this type of cumulative impact is attributable to the project alone, it shall be discussed in some detail.

Article 10. Considerations in Preparing EIRs and NDs

Incorporate Article 10 of the State CEQA Guidelines and add:

Although an EIR is not a technical document that can be prepared only by a registered professional, the County of San Diego requires before it will accept an environmental document as its own that the document be prepared by the County itself or a consultant certified pursuant to Appendix B.

Article 11. Type of EIRs

Incorporate Article 11 of the State CEQA Guidelines and add:

Time Extensions for Tentative Maps, Tentative Parcel Maps, and Major Use Permits and expired maps, where environmental conditions have not changed and where all services and utilities can still be provided shall be considered on-going projects and do not require additional CEQA review.

Grading permits or improvement plans where substantially in conformance with work shown on a Tentative Map or Tentative Parcel Map, shall be considered as on-going

projects and do not require additional CEQA review. However, such permits and plans may be subject to review for substantial conformance with the previously approved project.

Article 12. Special Situations

Incorporate Article 12 of the State CEQA Guidelines.

Article 13. Review and Evaluation of EIRs and NDs

Incorporate Article 13 of the State CEQA Guidelines.

Article 14. Projects Also Subject to the National Environmental Policy Act (NEPA)

Incorporate Article 14 of the State CEQA Guidelines.

Article 15. Litigation

Incorporate Article 15 of the State CEQA Guidelines.

Article 16. EIR Monitor

Incorporate Article 16 of the State CEQA Guidelines.

Article 17. Exemption for Certified State Regulatory Programs

Incorporate Article 17 of the State CEQA Guidelines.

Article 18. Statutory Exemptions

Incorporate Article 18 of the State CEQA Guidelines.

Article 19. Categorical Exemptions

Incorporate Article 19 of the State CEQA Guidelines and add:

19.1 Class 1: Existing Facilities

1. Conversion of existing rental mobilehome park into an airspace or mobilehome lot ownership park.

2. Conversion of existing roads which have been improved to public road standards from public roads to private roads where the road or road system is terminal and all users are party to reciprocal private easements.

3. Air Pollution Control Variances issued for the continued operation of existing facilities which were established lawful uses consistent with rules and

regulations in effect of the time of their construction or commencement of operations and where the Variance authorizes negligible or no expansions of use beyond that previously existing.

4. Renewals of existing leases.

5. New leases where there is only minor or no change to existing structures and where the new use will result in substantially the same environmental conditions (i.e., same traffic generation).

19.2 Class 3: New Construction or Conversion of Small Structures

1. Accessory structures, including greenhouses, barns, storage buildings, work/hobby shops and recreation rooms less than 4,000 square feet in floor area and include gazebos and playhouses.

2. Mobilehomes for farm employee housing.

3. Off-site real estate signs.

4. Accessory apartments for elderly, handicapped and family members.

5. Guest houses and accessory living quarters.

6. Sidewalk cafes.

7. Addition to or conversion of use of a portion of a single-family residence for a bed and breakfast facility in which no more than two bedrooms are made available for rent.

8. Within the Julian Historical District ("J" Special Area Designator), new single-family residences and small accessory structures normally ministerial where the location is not recognized for historical significance or for containing historical structures.

19.3 Class 4: Minor Alterations to Land

Encroachment for work in an open space easement granted for other than protection of environmental resources.

19.4 Class 5: Minor Alterations in Land Use Limitations

1. Approval of Site Plans where review is required by Design Review ("D") Designator or Community Design Review ("B") Designator strictly for the purpose of architectural and/or landscape controls.

2. Within the Julian Historical District ("J" Special Area Designator), external alterations to structures which have no historical significance as related to architecture or location.

3. Road Vacations where no use for public access purposes has been established.

4. Grading permits specifically exempted under the Grading Ordinance section of the County Code.

5. Specific Plans for official centerlines.

19.5 Class 6: Information Collection

1. Application for preliminary review to determine eligibility of projects for Community Development Block Grants ("CDBG Grant Applicants Package") made through the County of San Diego because specific projects are not authorized for approval, funding or construction in such applications.

2. To General Plan Conformance Reports.

19.6 Class 8: Actions by Regulatory Agencies for Protection of the Environment

Application of and associated Rezone for the Historic Landmark Overlay.

Article 20. Definitions

Incorporate Article 20 of the State CEQA Guidelines and add:

20.1 County Examples of State Terms

Ministerial

1. Certain Department of Health Services permits, such as septic tank permits, trailer permits, well permits and percolation tests on existing lots where no potential exists for impact to the environment.

2. Certificates of Compliance issued as the final step of the Tentative Map or Tentative Parcel Map process.

3. Certificates of Compliance issued on lots created legally before implementation of the Tentative Parcel Map process (1972).

4. Substantial conformance findings for minor adjustments in subdivision design due to actual terrain conditions.

5. Minor Deviations for minor adjustments in project design.

Private Project

Includes but is not limited to:

1. Major subdivisions (Tentative Maps).
2. Minor subdivisions (Tentative Parcel Maps).
3. Major and minor subdivision revisions or Resolution amendments.
4. Specific Plans/Large Scale Projects.
5. Specific Plan Amendments and Private Development Plans amendments.
6. Road openings.
7. Vacations of roads where public use has been established regardless of level of improvement.
8. Vacations of granted open space easements granted for protection of environmental resources.
9. Encroachments into open space easements granted for protection of environmental resources.
10. Zone Reclassifications.
11. Watercourse permits.
12. Major and Minor Use Permits.
13. Modification of use permits.
14. Administrative Permits and modification thereof.
15. Site Plans.
16. Variances resulting in the creation of any new parcel or in any change in land use or density.
17. Variances issued by the Air Pollution Control District where mitigating conditions of approval are identified by the Air Pollution Control District.
18. Grading permits not specifically exempted in the Grading Ordinance section of the County Code.

19. Improvement plans where additional grading or construction not shown on the Tentative Map or Tentative Parcel Map is proposed.

20. Boundary changes relating to County Sanitation Districts and the San Diego County Flood Control Districts.

Project

Includes but is not limited to:

1. Construction or major betterment of:

   (a) Sewer and water lines.

   (b) Water reclamation and sewerage facilities.

   (c) Airport facilities.

   (d) Street, road and bridge facilities.

   (e) Drainage and flood control facilities.

   (f) Public buildings.

   (g) Park and recreation facilities.

   (h) Major landscaping.

   (i) Parking lots.

2. Planning actions:

   (a) General Plan Amendments.

   (b) Specific Plans.

   (c) Regional plans.

   (d) Air, water, noise, pesticides, and solid waste disposal plans and programs.

   (e) Park development plans.

3. Other major activities:

(a) Pest control programs.

(b) Brush clearance programs.

Does not include:

Amendments to procedural and administrative provisions of The Zoning Ordinance and Subdivision Ordinance.

20.2 San Diego County Terms

Analyst

The analyst is any member of the County staff charged with the preparing and/or reviewing environmental documents for projects.

Approving Authority

The approving authority is the body which has the jurisdiction and authority to approve or carry out a project which is subject to review by the CEQA.

Planning and Environmental Review Board (PERB)

The PERB is responsible for the processing, preparation and review of environmental documents for projects under its jurisdiction and performing advisory review for environmental documents for certain public projects.

Processing Agency

The Processing Agency is an agency, department or other division with the County of San Diego responsible for processing a permit or other similar entitlement or initiating a public project subject to the requirements of these procedures.

SAN DIEGO COUNTY
CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES

ATTACHMENT B

REQUIREMENTS FOR PLACEMENT ON THE
ENVIRONMENTAL CONSULTANTS LIST

The San Diego County Department of Planning and Land Use requires "Statements of Qualifications" (SOQs) from individuals desiring to be placed on the County of San Diego's Environmental Consultants List. Interested consultants meeting at least the minimum qualifications, must submit their "Statement of Qualifications" to the Zoning Counter at the address below. A processing fee per individual must be paid at the time of application.

Attention: Environmental Consultants List Coordinator
County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B, M.S. 0650
San Diego, California 92123-1666

Application Submittal Package

Interested individuals shall submit the following:

1. Completed Statement of Qualifications Questionnaire

2. Copy of at least one EIR or technical study in each field in which placement on the list is being requested. These reports will not be returned unless sufficiently stamped and addressed envelopes are provided for return postage.

A list of consultants will be maintained for the following fields: acoustics, air quality, archaeology, biology, EIR preparer, fiscal analysis, geography, geology, history, hydraulics, hydrology, landscape architecture, planning, sociology, soils, traffic engineering, transportation planning, visual analysis, water quality. Other fields may be added as necessary by the Director of the Department of Planning and Land Use (Director). To add a discipline, the Director shall draft minimum qualifications.

I. MINIMUM QUALIFICATIONS STANDARDS

A. Individuals requesting placement on the Environmental Consultants List must meet specific standards of education, experience, professional registration (in some cases), and performance.

Applicants must demonstrate that they have four years of experience in the preparation of Environmental Impact Reports (EIRs) (for the "EIR preparer" category) or technical studies in each of the fields for which placement on the List is requested. The name of the applicant must appear on the

report or study and indicate that the individual was the actual preparer of the document. For those applicants whose experience has been within the public sector, four years of experience in the review of environmental documents in accordance with all applicable environmental laws, regulations, and ordinances may be substituted.

When more than one study is requested by the County, either through extended studies or an EIR, each of these studies must be prepared by an individual on the List in each of the specific fields of study requested, or by a consultant on the List in another field, as deemed appropriate by the Director, when there is not a field on the List in the field of study requested. Such consultants may be in the employ of the consultant with the primary responsibility for the environmental document, or they may serve in a sub-contractual relationship.

B. FIELDS REQUIRING PROFESSIONAL REGISTRATION AND FOUR YEARS OF EXPERIENCE

Geology	Registered Engineer/Geologist
Hydraulics	Registered Engineer
Hydrology	Registered Engineer
Soils	Registered Engineer/Geologist
Traffic Engineer	Registered Engineer

C. FIELDS REQUIRING FOUR YEARS OF EXPERIENCE AND A BACHELOR'S DEGREE IN A RELATED FIELD (OR ADDITIONAL EXPERIENCE EQUIVALENT TO A DEGREE)

The educational degrees listed below for each field are suggested degrees. However, the Director may determine on a case by case basis that other degrees or combinations of experience and course work meet the intent of the minimum standards.

Field	**Educational Degree**
Acoustics*	Physics, mechanical engineering, civil engineering, electrical engineering
Air Quality	Meteorology, environmental engineering
Archaeology*	Archaeology

Field	Educational Degree
Biology*	Biological sciences, botany, zoology
EIR Preparer	Environmental studies, biology, geology, archaeology, or other degrees when combined with qualifying experience
Fiscal Analysis	Economics
Geography	Geography
History*	History
Landscape Architecture*	Landscape Architecture
Planning	Geography, planning
Sociology	Sociology
Transportation Planning	Planning, with emphasis in transportation planning
Visual Analysis*	Landscape Architecture, planning, geography, architecture
Water Quality	Chemistry, environmental engineering

* Refer to the following additional requirements for these fields.

D. ADDITIONAL STANDARDS ARE HEREBY ESTABLISHED FOR THE FOLLOWING FIELDS:

Acoustics

1. Four (4) years acoustical engineering experience with a recognized engineering firm specializing in acoustics; or

2. An equivalent combination of education and relevant experience as determined by the Director; or

3. Has passed the Institute of Noise Control Engineering (INCE) professional examination.

Archaeology

1. Active certification in the Society of Professional Archaeologists, specializing in Cultural Resource Management, Archaeological Administration, or Field Research; or

2. Non-Society of Professional Archaeologists who currently engage in San Diego County archaeology may be qualified provided that they continue to actively participate in County archaeology.

Biology

1. Formal educational background in appropriate areas of study to understand local floral and faunal relationships. An example of this would include a Bachelor of Science or Master of Science degree in biology with an emphasis in botany, zoology, or ecology; and

2. Experience in habitat evaluation and prediction and quantification of environmental impacts; and

3. Local San Diego County experience in identification of flora or fauna, particularly rare, endangered, and threatened species with some knowledge of their local and range-wide population status and trends.

   or

4. An equivalent combination of education and relevant experience as determined by the Director.

History

1. Formal educational background in appropriate areas of study, such as Southern California history, and a Bachelor of Arts or Master of Arts degree; and

2. Demonstrated familiarity with Southern California history, with a record of research and publication to the satisfaction of the Director.

   or

3. An equivalent combination of education and relevant experience as determined by the Director.

Landscape Architecture

1. California landscape architect license; and

2. Knowledge of landscape planning and design, land use planning, drafting, surveying and mapping, architectural and engineering principles, hydrology and irrigation, soil science, ecology, biology, and construction materials and methods; and

3. Familiarity with local topography, soils, vegetation, and land use planning through local experience.

   Completion of one year of graduate course work may substitute for up to one year of experience.

Visual Analysis

1. Demonstrated familiarity, through course work and work experience, with visual aesthetics analysis, site planning, design criteria for development projects, graphics preparation for visual analysis, architectural issues, degrees of visibility, land use compatibility issues, and visual aspects of grading, signing, and other physical changes associated with development.

2. Minimum four years work experience in the preparation and review of visual analysis studies for development projects.

II. PERFORMANCE STANDARDS

In addition to the minimum standards of education and experience, the Director may take into consideration the following performance standards when determining whether a consultant should be placed on or removed from the Environmental Consultants List:

A. Compliance with State and County CEQA Guidelines.

B. Compliance with direction regarding clarification and/or correction of documents.

C. Accuracy of technical data, i.e. biological resource mapping, archaeological site mapping, use of current available traffic count data, use of proper computer programs for data analysis.

D. Use of appropriate field techniques.

E. Readability, clarity, and format of documents.

F. Sufficient factual statements provided to support conclusions.

G. Analyses reflect all applicable local, State and Federal rules, regulations, ordinances, and laws.

H. Quality of judgement, i.e., objective and scientific, regarding determination of environmental significance of impacts.

I. Mitigation measures proposed which are appropriate to the project and county regulatory procedures.

J. Compliance with timelines.

It is intended that these criteria will allow for reasonable differences in professional judgment while requiring adherence to acceptable standards of performance.

III. APPLICATION PROCESS

Environmental consultants requesting placement on the list shall adhere to and be evaluated by the following process:

A. The environmental consultant shall submit evidence as outlined above to the County of San Diego, Department of Planning and Land Use, which demonstrates compliance with the stated minimum qualifications.

B. Upon review and determination by the Director's appointed Environmental Consultants List Review Committee, consisting at a minimum of one Community Planning Chief and two Environmental Management Specialist IIIs, that the minimum qualifications and performance standards have been satisfied, the applicant will be recommended for placement on the List to the Director. However, if such review indicates that the applicant does not meet the minimum qualifications, the applicant shall be notified in writing of this determination.

C. Upon approval, the environmental consultant shall be placed on the County of San Diego's Environmental Consultants List.

IV. TERM OF PLACEMENT ON THE LIST

A. Placement on the Environmental Consultants List shall be for a term of four years. At the end of four years, the term is expired.

B. For consultants who were placed on the List on or before October 28, 1992, their terms will expire four years from the date they were placed on the List, or one year from October 28, 1992, whichever is the later date.

C. A consultant must be within an unexpired term when an EIR or technical study is first submitted. The consultant need not continue to be on the list in order for subsequent approval of the document to occur.

D. Applications for re-approval may be filed no earlier than 90 days and no later than 30 days from the end of the term.

V. ORIENTATION PROGRAM

To maintain placement on the List, all consultants are required to attend at least one orientation program conducted by the County within the first year of their term, and once again in the second half of the four year term. For consultants currently on the List, the first attendance must occur within the first year after of adoption of the new

procedures. These orientation programs are intended to provide consultants with information regarding the Department's requirements, procedures, expectations, and any new policies and regulations. Failure to attend the orientations during the specified time periods will result in removal from the List.

VI. REMOVAL FROM THE LIST

Individuals placed on the Environmental Consultants List prepare environmental documents that legally become the documents of the County as Lead Public Agency in accordance with CEQA. Consultants must comply with all instructions from County staff in terms of requirements of and changes to documents and information requested. Although differences in professional judgment do not necessarily make an environmental document inadequate, the final report must reflect staff's position. However, when the consultant's professional opinion differs from that of staff, these differences should be summarized in the draft EIR or technical studies and final EIR or Negative Declaration as a good faith effort at full disclosure of potentially significant environmental impacts and recommended mitigation measures.

Reports prepared by consultants must be based on appropriate field techniques, accurate mapping, objective and scientific judgment, and all other applicable standards of performance. The analysis of issues must reflect all applicable local, County, State, and Federal rules, regulations, ordinances, and laws.

Consultants who consistently produce inferior reports, i.e. those which are rejected by the County as inadequate in terms of technical accuracy or conformance with other performance standards, may be removed from the List by the Director on the basis of poor performance. Falsification of data to reduce the apparent intensity of environmental impacts shall be cause for automatic removal from the List. In addition, past performance will be an important criterion of the Director in deciding whether to re-approve an individual.

VII. APPEALS

Any decision by the Director regarding placement on the List of an individual may be appealed to the Board of Supervisors, whose decision will be final.

ATTACHMENT C

Adopted by the Board of Supervisors April 6, 1983

COUNTY OF SAN DIEGO ARCHAEOLOGICAL/HISTORICAL REPORT PROCEDURES

I. Introduction

What is the purpose for these procedures?

Archaeological resources are found in many areas of the County, and the effects of development on these resources must be considered in Initial Studies and/or Environmental Impact Reports (EIRs). These procedures are established for completion of reports covering such resources that may be significantly affected by a proposed project.

What are archaeological resources?

The terms include physical remains from all periods of human occupation in California from prehistoric into historic times.

What information is outlined in these procedures?

(1) Kinds of archaeological information required by the County, (2) qualifications for archaeologists and historians submitting reports, (3) definitions of terms, (4) procedures for conducting survey and filing Survey Report Form, (5) criteria for establishing mitigation needs, including by reference listing of Significant Research Questions for the San Diego region, (6) procedures for site testing, (7) methodology for establishing level of salvage, and (8) final report format.

When is a project subject to these procedures?

All applications for County approval subject to the CEQA are accompanied by an Initial Study or an EIR prepared by the applicant (or their representative). Staff analysts will review the application to

determine if an archaeological survey is needed.

Determination of survey requirement will be based on the following factors:

When will a survey be required?	1. examination of existing information; 2. staff field check; 3. suitability of topography; 4. type of vegetation; 5. known historic and prehistoric land use patterns; 6. potential for proposed project to impact resources.
When will a consultant be necessary?	If an archaeological survey is needed, the County will require the applicant to retain a qualified consultant to conduct a survey and submit a report to complete the project application.
What are the exceptions for a Tentative Parcel Map?	In most cases, no archaeological survey will be required for a Tentative Parcel Map where all lots average 40 acres or more with no single lot less than 20 acres in gross size, unless archaeological records or field investigation indicate a high potential for archaeological sites.
What is the relationship between a technical study and an EIR?	When staff determines that additional information is required, a technical study or an EIR will be required. A technical study will be sufficient when a Mitigated Negative Declaration or Negative Declaration is possible and when no known substantial public controversy exists. When staff is aware of substantial public controversy and/or a Mitigated Negative Declaration is not possible, an EIR will be required.
What is the difference between a full and focused EIR?	The County distinguishes between a focused EIR and a full EIR. A full EIR would always include a discussion of cultural resources. A focused EIR may or may not include such a discussion.
How much information need be in the body of an EIR?	Whenever cultural resource discussions are included in an EIR, the section shall include a summary of important published information, recorded archaeological sites, and results of any in-field surveys made of the project area. A Survey Report Form shall be an appendix to the EIR.

Is there a sunset provision for these procedures?

These procedures do not have a sunset date. However, the intent is for an on-going monitoring program by a volunteer committee from the professional community and other interested groups. Specific sections can be amended as monitoring indicates warranted. Particular attention will be directed towards methodologies in establishing mitigation levels, application of research questions to mitigation design and threshold criteria for archaeological investigation.

II. Definitions

Archaeological Site:

Archaeological resources are of either historic or prehistoric origin and represent the material remains of past inhabitants. They primarily require excavation to permit interpretation (e.g., historic privies, prehistoric middens, prehistoric rockshelters). Presence of any one of the following denotes an archaeological site: midden, multiple artifact classes, significant features or nonportable items.

Isolate:

An artifact found in a location where it was not in association with an archaeological site, as defined above, nor with more than 10 other items within a 20 meter diameter nor with another similar cluster within a 40 meter diameter (see Figure 1).

Midden:

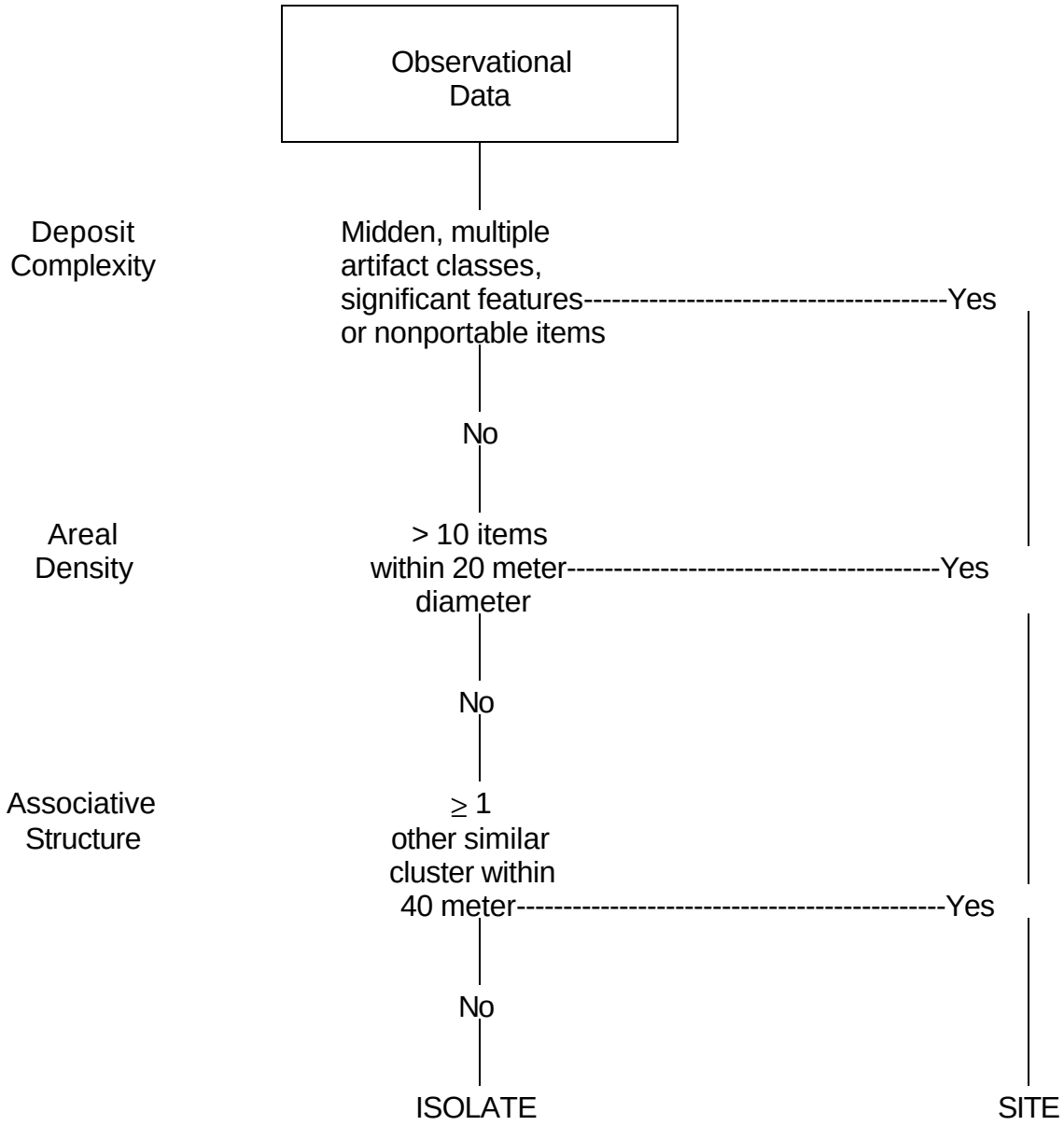
Midden must be obviously discernible. Evidence may include, but is not limited to, non-naturally darkened soils, abnormally organic-rich soils, ash- or charcoal-laden soils, cultural subsurface items of a more-than-incidental depth (roughly over about five centimeters), partially buried features, or recognizable vertical cultural stratigraphy.

At least three classes must be evident.

Multiple Artifact Classes:	Included, but not exclusively, are such classes as flakes/debitage, recognizable flaked lithic tools (including points), ceramics, milling implements (including handstones and metates or bedrock milling surfaces), bone or wood implements, decorative items (shell or stone beads, pendants, etc.), and such cultural ecofacts as shell or unmodified bone.
Nonportable Items:	Included in this class are such immovables as rock rings and alignments, cleared circles, bedrock milling surfaces, slab or basined metates, utilized rock shelters, quarries, and so on. The idea is that some things just cannot be realistically removed, even if found in isolation.
Other Definitions:	Definitions found in the California Environmental Quality Act Guidelines are included herein by reference.

FIGURE 1

FLOW CHART FOR DISTINGUISHING "ISOLATE" FROM "SITE"



Qualified Archaeologist:	An individual holding active certification in the Society of Professional Archaeologists (SOPA), specializing in Cultural Resource Management, Archaeological Administration or Field Research, is qualified to submit reports to the County of San Diego. After the date of the adoption of these guidelines all archaeologists who wish to submit reports to the County will have to first submit their resumes an evidence of SOPA certification except for those individuals now on the County's list of qualified archaeologists. Persons on the existing list at the time of the adoption of these guidelines, will be qualified provided that they continue to actively participate in County archaeology. If a qualified archaeologist does not submit an acceptable report to the County (or a State or Federal agency if the work related to San Diego County archaeology) for a period of 18 months, his/her name will be removed from the list and SOPA certification will be required to permit reactivation.
Qualified Historian:	An individual with a graduate degree in history and demonstrated familiarity in Southern California will be qualified to submit historic reports to the County of San Diego. Demonstrated familiarity means a record of research and publication to the satisfaction of the County. Persons who have submitted acceptable historical reports to the County prior to adoption of these procedures will be qualified provided that they continue to actively participate in County historical research. If a qualified historian does not submit an acceptable report to the County (or other jurisdictions if the work related to San Diego County history) for a period of 18 months, his/her name will be removed from the list and a graduate degree in history will be required

to permit reactivation.

San Diego County Appendix of Significant Archaeological Research Questions:

The listing of locally significant research concerns is appended to the County procedures (copies available at reproduction cost from County). The questions are not intended to be all inclusive but responsive to changes in the state-of-the-art. New problems can be proposed as site specific analysis indicates and used in the research design for mitigation of sites, provided County staff concurs that the research question can tentatively be included in the Appendix. Annually, a volunteer committee of archaeologists from the professional community and representatives from the construction industry will review jointly with staff all recently proposed problems for permanent inclusion in listing as well as deletion of any questions shown subsequently to be invalid or adequately addressed by previous investigations. The results of this committee will be reported each year to the Board of Supervisors (Administrative Agenda).

Significant Features:

Qualifying as significant features would be such things as hearths, structure remains, rock rings and cleared circles, trails, groupings of metates or mortars, intaglios, rock art, and inhumations or cremations. Historic features, such as corrals, cisterns, wells, improved or enhanced springs, mines, or structure foundations, could also qualify.

Standard Sample:

A standard sample for County purposes will have a surface area of one meter by one meter and a depth of ten centimeters.

Structural resources are principally historic in origin, and require archival information to permit interpretation (e.g., houses of historically important individuals, buildings

of architectural importance).

Structural Site:

Archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

Unique Archaeological Resources:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as oldest of its type or best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

III. Archaeological/Historical Survey and Reporting Criteria

Purpose:

A survey is done to determine whether or not significant impacts to archaeological resources will occur on a given piece of property. The field reconnaissance must be done by a qualified archaeologist and/or historian, depending on the suspected nature of the resources.

Area to be Surveyed:

Project property shall be surveyed as completely as possible, including portions not planned for immediate construction or alteration of natural landscape.

A Cultural Resources Survey Report Form

Archaeological/Historical Survey Report:	shall be completed for any archaeological/historical survey conducted under the direction of the County of San Diego (Form No. 1). The form must be signed by a qualified archaeologist or historian, depending on type of survey directed by the County.
Maps:	The locations of all resources shall be accurately plotted on a map of scale greater than or equal to 1 inch to 800 feet for submittal to the County.
Archaeologist's Records:	Level of excavation forms, posthole forms, list of artifacts collected and/or noted, field notes and photo log shall be retained by the archaeologist but be available to County staff on request.
Historical Features:	Structures and other types of surface features will be evaluated for both physical and social historical significance by a qualified historian. Subsurface evaluations will be conducted by a qualified archaeologist in accordance with the above requirements.
Review of Submittals:	Survey Report Form, historical reports, research designs and preservation plans will be reviewed by the County staff. The staff has the authority to either request modifications to the material or reject the material outright. Modification requests can be made to rectify incomplete submittals, provide more information concerning the resource, require additional archival information, or correct erroneous data. If a satisfactory report is not submitted after two requests for augmented information, the report may be rejected.
Modification and Rejection:	If a survey document is rejected, notification of that rejection will be placed on file at the County. This file will be

available for public inspection.

IV. Procedures for Archaeological Surveys (See Figure 2)

1. Obtain records checks from the San Diego Museum of Man and San Diego State University.

2. Complete the field work.

3. Complete the SURVEY REPORT FORM (Form No. 1) pages 1-4.

4. If NO archaeological resources are found, no additional work is needed.

5. If a resource is found, make the following determination:

   a. Isolate: Collect, record, and note on next two pages (titled Research Form) of SURVEY REPORT FORM. No additional work is needed.

   b. Site: Establish presence or absence of a subsurface component. Complete institutional site forms and submit to San Diego State University and the San Diego Museum of Man. If the site has no subsurface component, map, record, analyze and complete the remainder of the SURVEY REPORT FORM. Augment the Survey Report Form as necessary to present all recovered information and analytical results. Normally, no other work is needed, but the County may specify that the archaeologist provide limited additional services such as verifying that a site location is within the open space easement boundaries as described by the engineer.

6. If the site has a subsurface component, testing will be the next step, but timing will depend upon the circumstances of the project. Some subsurface testing, including such techniques as postholing to establish site boundaries, at the survey stage may be necessary to evaluate a site's potential, but excavation of more than two test units as part of a survey level investigation must be approved by County staff before any work is done.

7. Complete the site significance, data requirements, and impact and mitigation segments of the SURVEY REPORT FORM. This discussion must indicate the questions to be addressed and the data required for their resolution, and must relate the recommended mitigation measures to these needs. The foundation of this discussion should be the San Diego County Appendix of Significant Archaeological Research Questions. As a result of this discussion specific variables shall be identified. These variables will then be used to complete the sample size calculations on Forms 2, 3, and 4 OR, in the unique cases where a specific recovery level is required, Form 6.

If the site appears to have significance not yet recognized as a local concern, file completed Proposed Research Problem Form (No. 5) for each new research question.

The sample size determination requires that a preliminary sample be taken to assess variation within the site. This initial sample must be minimally two units which must be selected with a random element. Aligned, stratified or random designs are acceptable. The larger the initial sample the smaller the potential final sample.

8. Where no excavation in addition to test units excavated during the survey stage is required as a condition of project approval, a Final Report shall be completed prior to preparation of a Negative Declaration or final EIR. The report must conform to the format outlined in Section V.

V. Excavation and/or Preservation Mitigation Requirements and Final Report

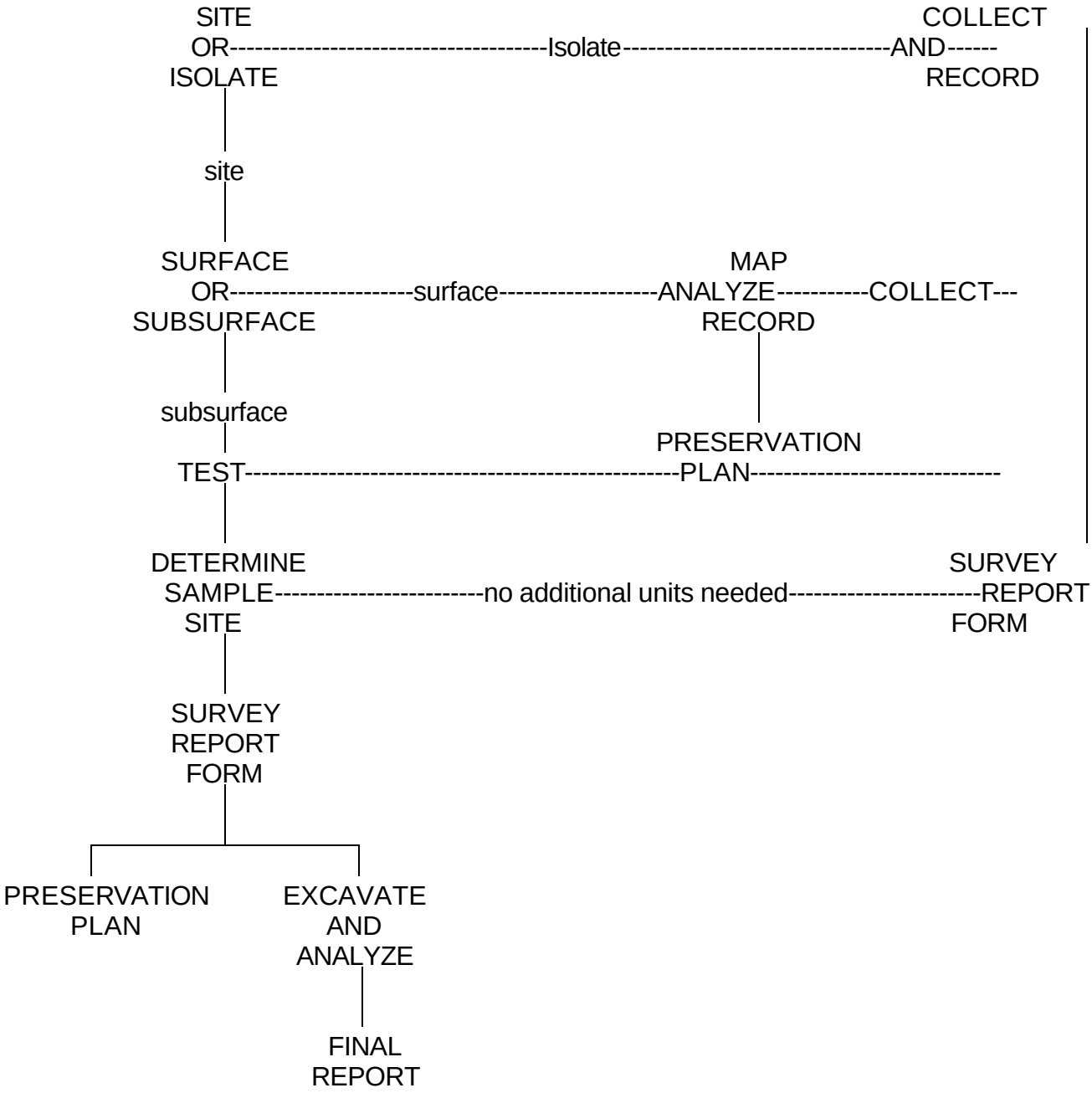
In most cases, mitigation occurs some period of time after the initial survey and as a result of the project's conditions of approval imposed by the County. In no case, should salvage commence without concurrence of County staff nor before approval of the project by the County:

1. Preservation shall be accomplished in accordance with an approved preservation plan; and verification of completion submitted to the County.

2. Excavation shall be in accordance with the approved research design. For cases pre-dating these procedures revisions, a testing program and research design shall be developed in accordance with these procedures and submitted to the County for approval prior to the salvage operation.

FIGURE 2

FLOW CHART FOR FIELD AND REPORT PROCEDURES



3. Reevaluation of the work effort necessary to mitigate impacts as a result of these requirements should occur periodically during the mitigation process. If during the process, the investigating archaeologist and County staff find that sufficient information has been collected to provide the information initially outlined, no further field work would be needed. Similarly, if during the completion of the required mitigation additional information becomes available indicating the potential for other important concerns, the work effort should be modified to consider the potential.

4. Information required in an Excavation Mitigation Report:

   The format of the following information is left to the discretion of the consulting archaeologist but the location of the information should be clearly identified. The report shall be typed and graphics must meet the American Antiquity Standards.

   A. Summary of work done:

      (1) Number of units.
      (2) Size of units.
      (3) Management reasons for the project.
      (4) Number of person days required for work. Identify lab, field, and report effort.

   B. Background

      (1) Summarize other work done at this site.
      (2) Summarize other important work done in the area.
      (3) Summarize the procedural basis for the work completed.
      (4) Provide the research design prepared prior to the onset of the work.

   C. Results

      (1) Provide data summaries by unit.
      (2) Provide data summaries by level.
      (3) Provide calculations for means and variance for measured variables.
      (4) Provide reference information for types, categories, classes and other terms. If not in published literature, provide definitions.
      (5) Provide descriptive statistics of any artifacts catalogued individually (e.g., length, widths, thickness, weight).
      (6) Provide any other recovered information.
      (7) Present analytical conclusions.

D. Public Disclosure

Provide short (1-3 pages) summary of salvage report in lay person's language.

VI. Implementing Procedure for Historical Resources Survey and Mitigation

1. Conduct record searches at San Diego State University and the San Diego Museum of Man to reveal the presence of previously-recorded historic sites on or near the subject property.

2. Complete the field work.

3. Complete pages 1-4 of the Survey Report Form (Form No. 1).

4. If NO historical resources are found, no additional work is needed.

5. If resources are identified either on the surface or through subsurface tests, conduct a chain of title on the property and follow with appropriate primary archival research. Archival research may include, but is not limited to, the review of newspapers, census data, tax and legal records, surveyors' field notes, historical photographs, and pertinent biographical information relating to previous owners. In some cases, an historical architect may be required in order to evaluate the potential significance of a structure. A report documenting the results of both phases of research should be submitted at this stage if no further work is considered necessary. If the resource, upon completion of both archival and field research, meets any of the criteria listed in the National Register, salvage or a preservation may result. Mitigation of impacts through excavation should proceed as is described in Section IV of the guidelines.

6. Information required in a permanent record report will vary with the type of resource and may be in the form of, but not limited to:

   a. Architectural drawings;

   b. Archival records;

   c. Historical information;

   d. Personal interviews; and/or

   e. Photographic documentation;

f. Analytical results.

7. Reports shall be typed in one of the standard English formats. Graphics shall be legible and prepared with permanent materials. Photographs shall adequately show features to be permanently documented.

County Application #

FORM NO. 1

CULTURAL RESOURCE SURVEY REPORT FORM

COUNTY OF SAN DIEGO

(All responses must be typed. Attach additional sheets if necessary. All graphics must meet American Antiquity Standards.)

Complete by:

_____ _____

Name Signature Date

Date of initial SOPA registration: _____

General Information

A. Name of Applicant _____

Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____

B. Name of organization/individual completing this form:

_____

_____

Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____

C. Project Location

1. The property is located on the N S E W (circle one) side of

_____ between

_____ and _____

Street address (if any): _____

2. Complete Assessor's parcel reference:

Book: _____ Page: _____ Parcel(s): _____

3. Attach a current U.S.G.S. quadrangle map showing the project boundaries accurately plotted.

Project Description

A. Describe in detail the main features of the project. This description should adequately reflect the ultimate use of the site in terms of all construction and development, verifiable by submitted drawings/plans. If the project will be phased, the anticipated phasing schedule should be described.

B. Proposed Site Use

1. Total area _____ acres

2. Number of buildings: _____

C. Topography and Grading

1. Percent of area previously graded: _____

2. Slope Classification:

	Existing
0-15%:	_____
16-25%:	_____
Over 25%:	_____

3. Area to be graded if archaeological resources could be impacted:

_____

D. Describe all off-site improvements necessary to implement the project, and their points of access or connection to the project site. These improvements include: new streets, street widening, extension of gas, electric, sewer, and water lines, cut and fill slopes and pedestrian and bicycle paths.

E. Additional Information

1. Use:

Project relationship to adjacent areas: Give compass direction in blanks as appropriate:
Private Dwellings _____ Multiple Dwellings: _____
Commercial: _____ Industrial: _____
Mobilehome: _____ Vacant: _____
Agriculture: _____ Indian Reservation: _____

2. Environmental Setting:

Does the project site contain any of the following physical features?

Rock Outcrops: _____ Streams: _____ Oak Groves: _____

3. Briefly describe the biological setting (note Community, Barliour and Major, 1980):

4. What is the distance from the central portion of the property to the nearest water source: _____ m

   Describe water source:

5. Briefly describe the geologic setting:

Survey Description

Date of Survey: _____

Institution/Individual Responsible: _____

_____

Individual in Charge: _____

Person hours required to complete field work: _____

Number of acres surveyed: _____

1. Intensity of Survey (Describe transect technique or submit survey route maps): ___

_____

_____

2. If area surveyed is different from project area explain: _____

_____

_____

Number of resources found: (ATTACH A COPY OF THE RESOURCE FORM FOR EACH RESOURCE INDICATED)

Isolates: _____

Prehistoric Sites: _____

Historic Sites: _____

Other Resources (Specify): _____

Background Research (previous studies within one mile):

Author	Title	Results (No. and Type of Sites)

List repositories from which record checks and/or historical documents were obtained and attach copies of the results.

List conditions that may have affected the accuracy of the survey results.

Resource Nos. County Application No. _____

SDi _____

W _____

Resource Form

(Attach one for each resource indicated on survey sheet)

Location (Attach Map):

UTM _____ N _____ E

Size:

_____ square meters _____ meters long (long axis)

_____ meters wide (short axis)

Depth: _____ centimeters

State basis for determination: _____

_____

List cultural materials observed (estimate number if possible):

Check:

Surface Only _____

Midden _____

Features _____

Structures _____

Briefly describe the site:

Describe any features noted:

Indicate slope classification where site is located: 0-15% _____

16-25% _____

Over 25% _____

What is the distance from site to the nearest water source:

Describe previous disturbance:

Describe any previous investigations:

List any published references:

Describe site recording/collecting procedures (attach maps and tables as needed).

Attach completed site record forms and indicate dated submitted:

Institution Submittal Date

Attach additional sheets as needed in order to provide all recovered information and analytical results.

Resource Nos.
SDi _____
W _____

(Prior to completion of this section, refer to the San Diego County Appendix of Significant Archaeological Research Questions. If proposing a research problem or issue not covered in this document, additionally complete and submit Form No. 5.)

Site Significant/Research Goals

Resource Number: _____

List and discuss research goals that would be addressed by information from this site supported by references. (Use additional sheet if needed.)

Resource Nos.
SDi _____
W _____

(Prior to completion of this section, refer to the San Diego County Appendix of Significant Archaeological Research Questions. If proposing a research problem or issue not covered in this document, additionally complete and submit Form No. 5.)

Site Significant Data

Resource Number: _____

List (in correspondence with goals enumerated on proceeding page) and discuss information needed to address research goals presented above. Be as specific as possible.

Resource Nos.
SDi _____
W _____

Impacts and Mitigation

Direct Impacts: (Be specific; cite proposed use, grading, etc.)

Indirect Impacts:

Mitigation Recommendations:

Check:

_____ Preservation (attach map of open space)

_____ Surface Map (show area to be mapped)

_____ Initial Subsurface Test (nature/extent)

_____ Excavation Program (nature/extent)

_____ Historic Documentation (describe)

_____ Other Special Studies (describe)

Detail the above check list (specifically referencing parenthetical points). Indicate relationship of recommended activity to the research potential and required information discussed above.

Resource Nos.
SDi _____
W _____

County Application No. _____

FORM NO. 2

VARIANCE AND MEAN CALCULATIONS
(Use separate copy of form for each variable)

VARIABLE LABEL: _____

OBSERVATIONS

Standard Sample (For these calculations must have been selected with a random element but may be different within a pit)	Observation (X)	X^2
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

(Attach more sheets as necessary)

SUM T= _____ S= _____

T^2= _____

Number of (1m x 1m x 10cm) Standard Samples Excavated = n = _____

Mean = T/n = _____ = M Move to Form No. 3

Variance = $\frac{S - T^2/n}{n-1}$ = _____ = V Move to Form No. 3

Resource Nos.
SDi _____
W _____

FORM NO. 3
SAMPLE SIZE CALCULATIONS

VARIABLE LABEL: _____

Number of Standard Samples = n = _____

Mean = M = _____

Variance = V = _____

To determine t use Table 1 below.

Total number of excavation Standard Samples needed

$$= U = \frac{t^2 \times V}{(0.2 \times M)^2} \times (1 + 2/n) = \_\_\_\_\_$$

For additional variables complete as many copies of Form No. 3a as necessary to provide a U value for each.

TABLE 1

Degrees of Freedom (n-1)	T	Degrees of Freedom (n-1)	T
1	12.706	22	2.074
2	4.303	23	2.069
3	3.182	24	2.064
4	2.776	25	2.060
5	2.571	26	2.056
6	2.447	27	2.052
7	2.365	28	2.048
8	2.306	29	2.045
9	2.262	30	2.042
10	2.228	35	2.030
11	2.201	40	2.021
12	2.179	45	2.014
13	2.160	50	2.008
14	2.145	55	2.004
15	2.131	60	2.000
16	2.120	70	1.994
17	2.110	80	1.989
18	2.101	90	1.986
19	2.093	100	1.982
20	2.086	120	1.980
21	2.080		

Analysis provides for a 95% confidence that the results from excavation are within 20% of the mean using a t-Distribution.

Resource Nos.
SDi ___________
W ___________

FORM NO. 3a

SAMPLE SIZE CALCULATIONS

VARIABLE LABEL: ________________________________

n = ____________

M = __________________

V = ____________

$$U = \frac{t^2 \times V}{(0.2 \times M)^2} \times (1 \times 2/n) = \_\_\_\_\_\_\_\_\_\_\_\_\_$$

VARIABLE LABEL: ____

n = _________________

M = __________________

V = _________________

$$U = \frac{t^2 \times V}{(0.2 \times M)^2} \times (1 \times 2/n) = \_\_\_\_\_\_\_\_$$

VARIABLE LABEL: ____

n = _________________

M = _____________

V = _________________

$$U = \frac{t^2 \times V}{(0.2 \times M)^2} \times (1 \times 2/n) = \_\_\_\_\_\_\_\_\_\_\_\_\_$$

VARIABLE LABEL: ____

n = _________________

M = __________________

V = _________________

$$U = \frac{t^2 \times V}{(0.2 \times M)^2} \times (1 \times 2/n) = \_\_\_\_\_\_\_\_$$

Resource Nos.
SDi _____
W _____

FORM NO. 4

SAMPLE SIZE SUMMARY AND DISCUSSION

Variable	"U"
1 _____	_____
2 _____	_____
3 _____	_____
4 _____	_____
5 _____	_____
6 _____	_____
7 _____	_____
8 _____	_____
9 _____	_____
10 _____	_____

Discuss the appropriate "U" as a sample for this resource. Provide substantiating explanation. (Note: Statistically an average of "U's" will not improve confidence in overall analysis. Therefore, one of the above calculated values based upon the established research goals should be selected.)

Indicate any special excavation effort deemed necessary and provide substantiating explanation.

Resource Nos.
SDi _____
W _____

County Application No. _____

FORM NO. 5

PROPOSED RESEARCH PROBLEM
COUNTY OF SAN DIEGO

Question:

Explanation:

Tests:

Data Needs:

Resource Nos.
SDi _____
W _____

County Application No. _____

FORM NO. 6

(Only acceptable when data requirements are for specific recovery levels and such information cannot be obtained through standard sampling.)

Variable: _____

Number of items required: _____

Mean = total observations/number of units excavated = _____

Sample size = number required/mean = _____

Variable: _____

Number of items required: _____

Mean = total observations/number of units excavated = _____

Sample size = number required/mean = _____

Variable: _____

Number of items required: _____

Mean = total observations/number of units excavated = _____

Sample size = number required/mean = _____

Discuss the appropriate sample size for this resource. Provide substantiating explanation.

Indicate any special excavation effort deemed necessary and provide substantiating explanation.

APPENDIX A

SAN DIEGO COUNTY
SIGNIFICANT ARCHAEOLOGICAL RESEARCH QUESTIONS

Adopted April 6, 1983

INTRODUCTION

As part of the review and revision process for the County's procedures, a set of research questions were developed. These questions, and the system to relate their resolution to the archaeological sites found as a result of the environmental assessment process, are presented to assure the relevance and value of any required investigation.

The questions in the research program should not be considered all inclusive. Archaeology has only begun to address these issues, and as the field becomes more sophisticated and additional information is available, the range of questions and the means to address them will change. Some questions will be resolved as others become apparent.

The questions presented below and the mechanisms proposed for associating them with the environmental review process must be considered only part of the design process. It remains for the consulting archaeologist to provide detail about the relationship of the data needs for a question or questions and the resources identified on a particular project. This association is a critical aspect of the ultimate program design.

The questions presented as part of this design can be grouped into four broad areas: prehistory, trade, land use, and cultural ecology. While it is obvious that these are not independent areas their heuristic separation will make the presentation of research questions clear.

The prehistoric questions involve the explanation of the sequence of occupation in San Diego County and how the occupation related to other regions and areas. In addition, it addresses the causes, whether cultural or environmental, responsible for those changes.

The question concerning trade and its socio-cultural implications obviously involves information from sites outside of San Diego County. The collection of information concerning these questions from local resources, however, must be considered in addressing management of these resources and mitigation of potential impacts.

The land use and ecological questions deal with the relationship of past occupants with neighboring groups and the biological and physical setting in which they occur. Land use questions consider settlement patterns associated with particular cultural groups, and how they changed over time. Similarly, ecological questions are aimed at identifying the nature of relationships between these groups and their environment. Of particular interest with the ecological questions are the response of the system to environmental stress and change.

Presentation of the questions are organized into four segments: the question; an explanation; a summary of the nature of some potential tests; and some potential data requirements. It remains for the practicing archaeologist to provide detail as to the operationalization of specific hypotheses, and the nature and extent of particular data requirements. It is the intent of the program to permit each project to build upon previous work, and it is anticipated that the questions and the means to examine them will be modified as work continues.

It will be apparent that data requirements for the various research topics are similar. While the nature of controlling variables or the particulars of a given test may differ, the proposed range of measures variables can be easily summarized. This summary is presented following the suggested research questions.

PREHISTORY

QUESTION: Did the siltation of the lagoons cause population movements in coastal San Diego County?

EXPLANATION: It has been argued that the impetus for the adoption of desert traits in San Diego prehistory, as represented by the appearance of the Late Prehistoric patterns, stemmed from the siltation of the San Diego embayments, and the cessation of the availability of shellfish. This argument has, in turn, been used to be evidence for the closure of coastal lagoons for an extended period of time. The question has been addressed by Shumway, Hubbs and Moriarty (1960), Warren and Pavesic (1961), Bull, Norwood and Hatley (1979) and Bull (1981).

TESTS: Evaluation of this question will require information from both archaeological and non-archaeological contexts. It will be necessary to collect information not "filtered" through a cultural system to ensure the accuracy of information concerning embayment viability. It will also be necessary to compare information from different lagoons to allow the assumption that siltation had a Countywide significant effect. In addition, it will be necessary to temporarily compare a wide variety of absolute dates from shell bearing resources, and assess that time line with other assemblage changes.

DATA NEEDS:

1. A valid and reliable sample of dated shellfish remains from non-site contexts.

2. Radio-carbon dates from shellfish bearing sites.

3. Comparison of archaeological data from different lagoon systems. This should include functional, stylistic and adaptive variables.

4. Palynological information directed toward developing a detailed climotological history of the San Diego area.

QUESTION: Can a distinction be drawn between the "Northern" and "Southern" Diegueno? Is the apparent distinction between assemblages in the desert and those in the mountains due to environment, or were they based on some other cultural criteria, and if so, did population movements following the desiccation of Lake Cahuilla cause language and material culture changes among the prehistoric Kumeyaay?

EXPLANATION: The development of the prehistoric Kumeyaay culture pattern in the southern Peninsular Mountains following AD 500 remains poorly understood and ill defined in the archaeological literature. Ethnographic research conducted during the 1930s by Kroeber and Gifford suggested that a distinction existed between the Northern and Southern Diegueno. There is an apparent difference between the assemblages in the mountains and the lower desert. This difference has been attributed to the relative environment (Weide 1974).

It was hypothesized through research in the Table Mountain area that Kumeyaay living on the west and south shores of Lake Cahuilla sought relief in the mountains when the lake resources diminished. Centers of population aggregation would be predicted to have formed in marginal areas in the high desert between AD 1500 and 1600. Distinctive crafts, arts, practices, and dialectical differences from the lower desert would have blended into the contact area during that time. Dialectic change would have been on-going during the 18th century contacts with the Spanish.

TESTS: The examination of collections from before and after AD 1500 would reveal distinct patterns. Certain trade items would always be present, although quantities would vary given political shifts over time. An increase of desert pottery and tool types such as Lower Colorado River Buff Ware and Desert Side-notched projectile points would be expected after that key point in time. Obsidian and exotic rock types would also increase in frequency. A very high density of short-term rancheria sites would be dated between AD 1500 and AD 1600 in the marginal areas of Jacumba Valley, reflecting the hiatus while the clans in Jacum and Jacume made arrangements for placing their relatives.

DATA NEEDS:

1. Absolute and relative dates.

2. Assemblage inventories for desert, mountains and coastal sites.

3. Relative representation of trade items and exotic materials.

4. Sourcing of lithic materials.

5. Detailed ceramic analysis.

6. Detailed stratigraphic information.

QUESTION: Were the "milling stone" groups a time and resource specific group? Similarly, what was the "cultural status" of those people responsible for the La Jolla pattern?

EXPLANATION: This question can actually be applied to any cultural construct. The milling stone horizon has been specifically selected since it is a concept recognized in the literature for the entire Southern California area. The La Jolla pattern is that element of the milling stone horizon found in San Diego County. The cultural identity of this group has been assumed since the work of Wallace (1954) and Warren (1961), Moriarty and others. The issue of the possibility that the pattern as described throughout Southern California has rarely been addressed. Harrison discussed this possibility for the Hunting and Oak Grove patterns in Santa Barbara Counties and reject it. Little has been done to test the validity of the cultural group concept for sites of this period.

TESTS: The test for this question relates to identification of patterns. If there is a milling stone group, they should share common traits, such as tool type preference and use occupation site locations, trade relationships with one another and contemporaneity. So called milling sites need to be compared to see what they have in common. Variability between sites of the same time period should be less even in diverse settings, then between milling stone sites and sites of other periods. By definition, if the milling stone period is a valid cultural construct, then so is the La Jolla pattern.

DATA NEEDS:

1. Dates both relative and absolute.

2. Subsistence schemes must be reconstructed using functional tool attributes. For example, do all milling sites have mostly manos and metates.

3. Attribute analysis between sites would also be necessary to determine if a) materials are mostly local or traded; b) certain attributes such as those composing a scraper are dominant; and c) the types of attributes (relative proportions) are distinct in time and space.

QUESTION: Has occupation in Southern California been continuous over the past 10,000 years?

EXPLANATION: This question aims at evaluating the numerous groups archaeologists have identified in San Diego. The current scheme is as follows: Early Man, San Dieguito, La Jolla, Yuman. Did these groups replace each other, if so, how and why? Can we identify the beginning and end of each group's occupation?

TESTS: It has been obvious to archaeologists for many years that there are patterns during certain time periods in artifacts. These patterns have been closely examined in the American southwest, which has an accepted cultural chronology spanning over 2,000 years. The first requirement to answer the question in Southern California is to develop the same type of chronology.

DATA NEEDS:

1. Relative and absolute dates.

2. Correlation of dates with assemblage characteristics indicative of a common cognitive origin.

3. Information concerning the processing of locally available lithic materials, and the nature of technology evident in each "time period".

4. The influence of function on the nature of recovered materials.

QUESTION: What is the relationship between ethnographic linguistic groups and the people responsible for the San Diego County archaeological record? What is the legitimacy of the concept of a "Shoshonean wedge"?

EXPLANATION: Linguistic arguments have been proffered that there was, at one time, a proto-Hokan linguistic stock throughout California. Furthermore, it has been held that this continuous group was disrupted by intrusive Penutian and Uto Aztecan speakers. In Southern California this has been presented as a Hokan group (Chumash/Yuman) being disrupted by incoming Uto-Aztecans (Luisenic). This Luisenic intrusion is commonly referred to as the Shoshonean wedge.

TESTS: In order to address these questions it is necessary to distinguish between assemblages representative of different linguistic groups. This process has serious philosophical and pragmatic difficulties, but careful hypothesis development and testing should be able to resolve these concerns. The question has been addressed by True (1966), Taylor (1964) and Bull (1977). Specific tests would include differentiation between Hokan and Uto-Aztecan assemblages, identification of expansions of desert groups with both archaeological and linguistic evidence, and detailed ethnographic/archaeological studies.

DATA NEEDS:

1. Complete descriptions of cultural materials from ethnographically recorded sites.

2. Focus on variables which are not solely controlled by "function" or "natural environment" (stylistic variables).

3. Comparative assessment between other coastal sites and desert sites. This would include variability of lithic materials (trade), coastal focus variables, ceramics analysis, and variation in projectile point types.

QUESTION: What was the relationship between the Anglo and Indian populations during the contact period?

EXPLANATION: In other parts of the American west, relationships developed between Anglos and Indians that were mutually beneficial. Indian villages were established near ranches to take advantage of employment opportunities and discards. Of equal interest were Anglo settlement locations selected because of availability of native labor, as in the Spanish southwest.

TESTS: First, contemporaneity between Indian and European settlements must be shown. Then a relationship must be established between the two groups. In Grass Valley, Nevada, the Shoshoni lived adjacent to the ranch and worked for the ranchers. They were also entitled to discards from butchered livestock. The Indian sites contained discarded butchered bones such as knuckles, and European goods modified for aboriginal use (tin cans flattened and used as shingles for pit house roofs).

DATA NEEDS:

1. Absolute and relative dates for sites are needed. An Indian site with historic artifacts would be accepted as contemporary with a nearby European structure with contemporary historic materials.

2. An interrelationship is established through finding Indian ceramics in European contact, European ceramics, butchered livestock bones, and metal used aboriginally in Indian sites.

QUESTION: How long have people lived in the New World? Is there a Pleistocene occupation, and, if so, how did its representatives relate to the San Dieguito previously identified in Southern California?

EXPLANATION: This evaluation of the Early Man position is a complex one. Recent claims for an "American genesis" and antiquity of humans in the New World in excess of 200,000 years have caused disagreements among archaeologists. These claims must be evaluated scientifically.

This question also involves the cultural and temporal nature of the San Dieguito pattern. Consideration of this pattern must include an evaluation of the identification of San Dieguito sites in coastal San Diego County and in the desert area. This concern is expressed by evaluation of the relationship between S.D.I and II and S.D. III patterns.

TESTS: Since the sites of ancient humans have been recognized easily in the Old World, we should apply the same requirements on sites here. A range of tools and artifacts should be found, representing a variety of activities. Accepted dating must be obtained at each site investigated, and stratigraphic context firmly established.

DATA NEEDS:

1. Attribute analysis must include both "artifact" and "non-artifact" specimens.

2. Development of hypothesis addressing the spatial associations of different artifact types is necessary.

3. Sites with multiple use categories, geological context, and spatial aggregation are necessary.

4. Consideration of the defining criteria for each San Dieguito phase and their relative chronological placement.

QUESTION: When did pottery making technology enter California and what impact did it have on Indian culture?

EXPLANATION: Dates of 1100 AD, 1195 AD and 895 AD have been obtained from a ceramic bearing site at Santee Greens (Berryman n.d.). Cottonwood Creek provided a ceramic date of 930 AD, and sites at Mother Grundy Mountain dates of 895 AD and 1350 AD. All these dates are associated with Tizon Brown Ware, a type which has been dated in the northwestern mountains of Arizona at about 1100 AD. The origins of this type are not well known. It has been proposed that an unknown pottery making culture spread ceramics along the Colorado River, west to the Salton Sea in California and up into the mountain river drainages between 700 and 730 AD.

TESTS: Tests for the origins of ceramics will require obtaining absolute dates on ceramic types found within San Diego County. In addition, information concerning the variability within ceramic types is needed. The reliability of the type constructs is important to be able to use the resulting information in considering the cultural affiliation of the groups responsible.

DATA NEEDS:

1. Variation within and between ceramic types.

2. Radio-carbon thermolumence, or other absolute dates on ceramic bearing strata.

3. Relative dates (i.e., obsidian hydration, style variability) of ceramic bearing strata.

4. Variation in non-ceramic functional and non-functional artifact categories in comparison to dated ceramic strata.

QUESTION: What were the cycles of coastal climatic change over the past 10,000 years and how did these changes affect prehistoric Indian land use?

EXPLANATION: Archaeological explanations have relied on climatic changes as causal mechanisms in prehistoric culture change in San Diego and Southern California. The desiccation of Lake Cahuilla, siltation of coastal lagoons, changes in the distribution of Quercus sp. and Pinus sp., and the rise of sea level have all been used as explanations for the changes seen in the archaeological record of San Diego.

TESTS: Identification of significant environmental changes is the first step in addressing this question. This requires collection of information from both site and non-site contexts in the form of pollen, diatoms, oxygen isotopes in shellfish, changes in the floral and faunal records, nutritional information from skeletal remains, and other temperature sensitive indicators.

Once this information is obtained independent of cultural modifiers, association of cultural changes with environmental ones will permit consideration of this question. Involved in this analysis will be the functional analysis of artifacts. The role of such items as "scraper planes", or "mortars" may be indicative of a restricted range of exploited resources.

DATA NEEDS:

1. Environmental data from basin, desert and coastal areas including floral and faunal records and geological events.

2. Correlation of the non-cultural environmental record with cultural information.

3. Detailed temporal control for both cultural and non-cultural events.

4. Functional analysis of cultural materials, and correlation of the results with specific environmental changes controlled for setting.

CULTURAL ECOLOGY

QUESTION: How were resources depleted?

EXPLANATION: In order to address the main topic we need to know how and why resources became depleted. Over-exploitation, poor land management, and over population may have been causes. These may have occurred in conjunction with natural environmental changes. In San Diego County an important aspect of this question is shellfish depletion in the coastal lagoons. Archaeologists have claimed that noted changes in shell species representation through time (levels) was due to the depletion of one of the species. This over exploitation forced the group to choose another species for consumption.

TESTS: If certain groups exploiting a lagoon switch species because the number of individuals becomes too low, it would be expected that a control column taken outside the site would have the same pattern.

If one group's over exploitation caused depletion in the population of a species in the lagoon, it would be expected that this would happen at different times with different species at different lagoons; all lagoons would not have the same patterns.

DATA NEEDS:

1. Shellfish species count and weight by level from sites around lagoon.

2. C14 dates from levels representing changes from one species to another.

3. Control samples of shellfish taken outside a site.

QUESTION: How were depleted resources replaced?

EXPLANATION: If we show that certain resources such as shellfish were depleted it will be important to know what replaced them in the paleodiet.

TESTS: It will be necessary to statistically identify the points of decline and increase of any resource.

DATA NEEDS:

1. Counts and weights of shellfish species by level.

2. Counts and weights of bone by species by level.

3. Counts and weights of macro-flora remains by species by level.

QUESTION: When a resource was depleted did groups fraction and move or did populations aggregate?

EXPLANATION: There is evidence in prehistory for both of these actions. The Cahuilla split along clan lines when resources became scarce. In the American southwest independent groups came together under famine conditions.

TESTS: If groups fractioned in periods of resource depletion, the point of decline of a resource should correspond with a population decline in the immediate area. Large sites should be replaced by small sites as groups split up and move away. Conversely, if populations tended to aggregate during periods of stress, resource decline should positively correlate to a noted increase in the size of sites and a reduction in the number.

DATA NEEDS:

1. C14 dates for large and small sites along the coast.

2. Counts and weights for shellfish species in all these sites.

3. Correlation of relative dates by size for sites in areas or apparent resource depletion.

QUESTION: Was the environment manipulated to encourage the growth of certain species?

EXPLANATION: One form of environment change is to modify the environment for the benefit of desired species. Farming is an example. Recent work has identified areas where the ethnographic Owens Valley Paiute and Cahuilla cleared areas to encourage weed annuals whose seeds were eaten. The resolution of this question is important to understand the emergence of agriculture and the role it played in the development of local inhabitants. This question closely relates to the questions addressing the occurrence of horticulture.

TESTS: The remains of encouraged annuals such as composites and amaranths should be found as pollen and macroflora. Berline, Hevly et al. were able to identify Sinagua field areas in Arizona from pollen profiles taken in flat areas near sites.

DATA NEEDS:

1. Pollen analysis of midden soils.

2. Column samples analyzed for macroflora.

3. Consideration of agricultural features such as but not limited to irrigation, terracing, or other surface modification.

QUESTION: Did horticulture exist in prehistoric Southern California? Was there prehistoric horticulture in the southwestern United States outside of the core area?

EXPLANATION: This question has been discussed at length by Bean, Lawton, Wilke, and others in relation to the Cahuilla. It is claimed that the Cahuilla, Chemehuevi, Mojave, and Yumans had a type of horticulture prior to the Spanish contact consisting of transplanting, watering, and encouraging the growth of native plants. For example, the Cahuilla are supposed to have had kitchen gardens. The Mojave and Yumans relied on floodwater from the Colorado River to irrigate their gardens. Recent investigation indicated that the Owens Valley Paiute encouraged the growth of certain annuals through ground clearance, water diversion and seeding.

TESTS: Information required includes the availability and reliability of water, supplemental requirements of native diets, and available technology. Plant residue on tools, use modification such as silica polish marks, caloric requirements, relative occurrence of animal and plant remains, and variation between site and non-site pollen records would be useful in assessing prehistoric horticulture.

DATA NEEDS:

1. Pollen records from both site and non-site contexts.

2. Functional analysis of ground and flakes lithic tools.

3. Types and variation in food bone.

4. Variation in macro plant remains.

5. All of the above correlated for time.

QUESTION: Trace the development of agricultural pursuits carried out during the Late Archaic period: did the Kumeyaay peoples practice some type of proto-agriculture/incipient agriculture?

EXPLANATION: The Kumeyaay peoples are considered to be a hunting/gathering society with seasonal campsites and a pattern of winter and summer campsites. Very few hunter/gather societies in the world have developed the knowledge of pottery making. Most hunter/gatherer peoples do not make or use pottery--why did the Kumeyaay people develop the need for such an artifact? It is highly unlikely that the people of the Late Archaic time period (Kumeyaay) relied strictly on the acorn harvest--too much emphasis has been placed on this type of resource. Ethnographic data indicates that the Kumeyaay peoples were aware of growing seasons and probably practiced some type of plant care prior to the Spanish conquest.

TESTS: The only way to test for proto-agriculture/incipient agriculture activities is to conduct palynological tests within each village site or large occupation area. By conducting a series of palynological studies, wherever possible, we will begin to understand what type of plant resources were being utilized. Shipek reports that the Kumeyaay had some type of "grass" prior to the Spanish introduction of wheat and rye. If the Kumeyaay were practicing some type of plant cultivation, pollen studies would help define general patterns and plant occurrences.

DATA NEEDS:

1. Complete palynological study of Late Archaic sites; radio-carbon dates for each site area.

2. Complete flora and faunal analysis of remains recovered from each site.

3. Representative sample of valley, low and high mountain and desert sites would be required for comparisons.

TRADE

QUESTION: What was the extent of prehistoric trade and what were its associated socio-cultural implications?

EXPLANATION: Evidence of trade between desert and coastal populations, among groups living along the coast, and between peoples of the Great Basin and those in San Diego exists in the form of exotic lithic and ceramic materials, and in stylized, traded artifacts. Specific concerns in this area include the sources and trade networks responsible for the distribution of such materials as obsidian, chalcedonies, and fused shale, the spread of ceramics, specifically the distribution of Tizon Brown Ware and Lower Colorado River Buff Ware, and the relationship of such stylized items as Rose Spring/Eastgate, Elko, Pinto, Desert Side Notch, Cottonwood and Gyspsum Cave points.

The elucidation of these relationships will permit the consideration of social relationships of prehistoric groups. This will aid the development of chronological explanations, and provide the foundation for many of the other archaeological questions.

TESTS: To access the nature and extent of trade and how it changed, it is necessary to correlate the trade items, their points of origin and destination, temporally. Stratigraphic controls within sites, absolute and relative dates, and correlation of interregional time markers with intraregional events are all components of this topical area. Of specific concern, and having particularly high potential, is obsidian. Through detailed hydration and sourcing studies it should be possible to relate sources as geographically distinct as Mexico and Mono County, California with distribution systems and cultural associations over thousands of years. Both form and construction variability within ceramic series could also be useful. Finally, stylistic variability in other artifact classes, such as projectile points, could be similarly treated.

DATA NEEDS:

1. Obsidian hydration measures.

2. Sourcing for obsidian both from sites and from collection areas.

3. Hydration measures correlated with radio-carbon dates.

4. Variability within Tizon Brown Wares and Lower Colorado River Buff Wares, controlled for location.

5. Correlation of exotic materials with relative and absolute dates between different regions.

6. Temporal and spatial correlation of stylistic types.

LAND USE

QUESTION: Were different embayment drainage systems occupied by different socio-cultural groups?

EXPLANATION: Hanna and Bull proposed that drainage systems associated with embayments represented socially significant areas. This consideration would require the coastal-inland relationship took primacy over relations along the coast. The same question has been discussed by Walker (1981) in considering the settlement pattern of groups occupying areas around Batiquitos Lagoon.

TESTS: Consideration of the question requires the comparison of variability within and between lagoon systems. The comparison must be made on variables which are not determined solely by location, but which potentially reflect cultural group. By factoring out the effects of the environment, those elements which are determined by the specific system in which a site is located, it should be possible to assess cultural affiliation.

This question obviously requires a definition of a lagoon system and selection of culturally sensitive variables.

DATA NEEDS:

1. Variability of ceramics within and between embayment systems.

2. Variability of point styles within and between systems.

3. Variation of relative frequency of tool categories.

4. Variation in evidence of use damage controlled for the environmental setting.

QUESTION: Did groups migrate seasonally from coastal to inland areas?

EXPLANATION: The reconstruction of a seasonal schedule for a group has been done by Flannery, Hector and others. Seasonal transhumance has been ethnographically documented for hunter/gatherers. Are the coastal and inland sites we observe the seasonal camps of the same group rather than manifestations of unique cultures?

TESTS: Seasonal schedules need to be constructed based on the environment and functional attributes of tools at contemporaneous coastal and inland sites. The schedules should be exclusive.

DATA NEEDS:

1. Catchment data and seasons of availability should be constructed for the sites.

2. Dates are required to show contemporaneity.

3. Tool functions should correspond to prehistoric seasonal exploitation. For example, an inland site with predicted fall occupation should have milling tools for acorn processing.

QUESTION: Did each group living at a site have its own infra and extra site territories?

EXPLANATION: Ethnographic work with the Cahuilla indicates that each clan or kin group had a mesquite grove they alone could exploit. Was the same true prehistorically? The Chumash "owned" outcrops for rock art. Did this extend to territorially within the site? Would each kin group have its own lithic workship area, ceramic production area, etc?

TESTS: If each subgroup in a village had its own production area within the village, it would be expected that contemporaneous duplicate production areas would be identified. Contemporaneous duplicate special activity sites should be found within a site's catchment area.

DATA NEEDS:

1. Attribute analysis to identify specialized production areas' needs to be done for the village. This test compares attributes between units.

2. Catchment studies for each village to identify rock art sites, quarries, milling areas should be done.

3. Radio-carbon dates are needed to establish contemporaneity.

QUESTION: Were sites (locations) used repeatedly over a long period of time by different people or were they associated with only one group?

EXPLANATION: It is possible that preferred locations were used by a variety of groups attracted to an area by a resource rather than a territorial imperative. It was found at a site in Nevada by Hector, that a preferred location in a pasture near a creek was used for 5,000 years by three different groups.

TESTS: If different groups occupied the same area, stratigraphically and horizontal differences in attributes should be detectable. For example, Group A may have been aceramic and occupied only a small part of the site. Group B at a later time, had ceramics and occupied a much larger area.

DATA NEEDS:

1. Artifacts and attributes tied to social group rather than determined by a particular setting need to be reviewed by depth.

2. Natural stratigraphic associations to control for actual temporal differences as measured on assemblage characteristics.

QUESTION: For a particular site, were specialized activities conducted in extra site areas or within the boundaries of the main site?

EXPLANATION: Archaeologists have assumed that special activity sites such as quarries, milling features, and rock art sites are associated with village sites. However, it is not known whether this was the case for all groups at all times.

TESTS: If groups did not have extra site special activity areas, it would be expected that evidence for all activities would be found within a site's boundaries. There would also be no contemporaneous special activity sites in the main site's catchment area.

DATA NEEDS:

1. Attribute analysis to assess the range of activities represented at a site. For example, the disproportionate presence of primary flakes and cores would indicate that raw materials were brought into a site for processing rather than this activity occurring at a quarry.

2. Radio-carbon dates for all sites in specific catchment area and comparison of intercatchment dates.

DATA SUMMARY

Data needs for addressing the questions posed on the proceeding pages fall into specific areas. The following list of data requirements was gleaned from these needs. All aspects of this list must be controlled for age, location, and setting. As such, each of the following data items can be considered as three sets of requirements. Location and present setting are obvious, but past setting and date information must be recovered from the resources under study.

1. Absolute and relative dates (i.e., obsidian hydration, radio-carbon, index types, stratigraphic superposition, dendrochronology, thermolumenescence).

2. Pollen information.

3. Amounts (Counts and/or Weights) of the following controlled for site, unit, and level:

    a. Shellfish by genus or species.

    b. Bone by species.

    c. Artifacts by class and type.

    d. Macrofloral remains.

4. Analysis of variability within and between:

    a. Features.

    b. Projectile point styles.

    c. Ceramics.

    d. Use damage.

    e. Functional types.

    f. Stylistic types.

    g. Ground stone artifacts.

    h. Flakes stone artifacts.

    i. Shell and bone artifacts.

    j. Lithic materials.

k. Historic artifacts.

5. Stratigraphic controls.

6. Horizontal controls.

7. Environmental and geological context.

8. Detailed information from ethnographically recorded sites.

9. Reference environmental information collected from non-site contexts.

ATTACHMENT D

BIOLOGICAL SURVEY GUIDELINES

Guidelines should appropriately address the information desired, not detail the means to obtaining that information. They are intended to provide consistency in biological reports and offer suggested formats to contain basic information.

I. GOALS

Goals of the biological survey and report and, indirectly, these guidelines are as follows:

A. To promote an efficient presentation of information for adequate and effective environmental review in meeting the requirements of the CEQA.

B. To increase the efficiency of the environmental review process, to prevent unnecessary time delays, to standardize surveys and reports, and to define the minimum information necessary.

C. To provide the project applicant sufficient information in a timely manner to permit appropriate planning decisions prior to finalizing project designs.

D. To identify rare, endangered or sensitive species, habitats and communities.

E. To ensure that information collected in past projects can have some utility in evaluating future projects in similar circumstances.

These guidelines are meant to guide the content of biology technical reports and will be used to determine acceptability for use in EIRs and Extended Initial Studies.

II. TYPES OF SURVEYS

No two project sites are identical in terms of biological resources present, the degree of disturbance, the proximity to other developed areas, and the type of project proposed. For these reasons, the following types of biological surveys are suggested. Items discussed under each survey type should be included where practical or appropriate.

This allows the field investigator and reviewing agency sufficient flexibility while still meeting the requirements of the CEQA.

A. Basic Survey

This survey is for projects involving or permitting modifications of land in a

natural or near natural state, and/or in all areas containing sensitive habitats or sensitive species (including County adopted Resource Conservation Areas).

1. Time in the field shall be proportional to the size of the project, biological heterogeneity and significance of sensitive habitats present.

2. Data collected should be quantified where possible.

3. Small mammal trapping should be conducted where the biologist deems it appropriate and may be required in situations where the presence of Stephens' kangaroo rat (Dipodomys stephensi, a rare species) is suspected.

4. It is highly recommended that field surveys be performed when the most critical resources can be best evaluated.

5. The most recent generally acceptable nomenclature shall be used to indicate plant and animal names to avoid confusion (see Attachment I or more recent literature for suggested references).

B. Specialized Surveys

These surveys would be directed towards projects involving minimal habitat alteration, or agricultural areas presently or recently under cultivation, or areas essentially devoid of native vegetation, insofar as they involve no critical habitats.

1. The emphasis of the survey shall be towards describing the project site and vicinity and any unique or sensitive biological resources and consequent impacts to these resources by the project.

2. A statement explaining the physical/biological basis for the lack of expected resources shall be included.

III. REPORT FORM AND CONTENT

The following format is suggested for the biological survey report. Each report will vary according to the type of survey performed, but all points listed should be included. For specialized surveys and surveys with negative results, the format can be presented in correspondence form.

A. Cover Page

Include a signature block of the principal investigators and the name of the project, including permit number(s).

B. Summary of Findings

Briefly state the results of the survey, sensitive species present, and the impacts anticipated with any feasible measures to reduce or eliminate likely impacts.

C. Introduction

Briefly describe the proposed project, its size and location (including a vicinity map of appropriate scale to show nearby roads or other features). Physical characteristics of the property and vicinity should also be included (i.e., topographic characteristics, water resources, soil and rock types and outcroppings, land uses on property and in vicinity; including publicly owned lands).

D. Methods and Survey Limitations

Description of methods and materials used in the survey, such as the survey techniques uses; dates, times, and conditions during the survey; limitations and rationale for the survey (e.g., that proportion of the property directly surveyed or seasonal variability); and a map, where appropriate, showing locations of transects, sample points and the areas actually visited.

E. Results

This section will include a description of botanical and zoological resources on the property; including appropriate maps showing vegetation types and locations of sensitive plant/animal resources. Lists of species present or suspected should be placed at the end of the report.

The following are suggestions for discussion of this basic information (vegetation maps, lists, etc.):

1. Mapping of Information. All maps submitted with the biology report must be of a scale sufficient to show the location of the resources identified and their relationship to aspects of the project likely to adversely affect the resources. Elevations and north direction must be indicated on all maps. In addition, at least one copy of a full scale project map (Tentative Map, Tentative Parcel Map, Special Use Permit, Variance, etc.) must be submitted, showing the resources identified and project characteristics including lot lines, roads, grading, open space easements, etc. For projects which have simple

schematic project maps, the resource maps should be of sufficient size to demonstrate the resources present and indicate topographic relationships.

2. Botany. Describe the existing plant communities, as well as disturbed areas, and list the dominant (indicator) species of each vegetation, community type. Include a vegetation map (at least one copy submitted must be on a project plan map) showing relationship to the development proposal. The amount of each plant community or habitat type present on the property should be indicated in acres (or hectares); include quantitative and transect data when appropriate. Include in the report (or appendix, if appropriate) a complete listing of all plant species observed, including scientific, and where available, common names. Indicate in which community or habitat each species was found and which species are not native to the area.

3. Zoology. Provide a list of all vertebrate species observed or detected. Indicate the numbers of individuals detected or estimated. Note indications of breeding activity (i.e., nests, dens) on the property. Occurrence of the species should be related to the vegetative community of wildlife habitat types on the property when possible. Relative amounts of each wildlife habitat type should be indicated (may be same as plant communities). Both common and scientific names should be used. "Regional Lists" are not acceptable; listing of particular expected species may be appropriate but should be justified (migratory, estivating, nocturnal species, etc.).

   Discuss invertebrates in special situations (i.e., rare, threatened, or endangered butterfly species, unusual species concentrations, pest species, and marine habitats).

If a species reported on the property is considered rare or unusual in occurrence in the region, verify its identification with a species diagnostic description.

Indicate locations of (on at least one copy of a project map) and discuss areas exhibiting concentrations or a higher diversity of wildlife or wildlife signs, and discuss possible reasons for these activities (including amphibian breeding areas, deer feeding and raptor hunting areas, etc.). Such areas may reflect physical attributes of the property such as dunes, rock outcrops, streams, ponds, stands of trees, etc. which should be mapped.

4. Rare and/or Endangered or Sensitive Species and Habitats. The report shall contain a separate discussion of any species occurring on or using areas directly or indirectly affected by the project, which are recognized by a government agency or conservation or scientific group as being depleted, potentially depleted, declining, rare, locally endemic, endangered, or threatened, and/or any species nominated for or on a State or Federal rare, endangered, or threatened species list (see Attachment II). The choice of plant species discussed shall be based on the California Native Plant Society list (Powell, 1974) or more recent data. For each such species indicate the number of individuals observed on or immediately off-site (the total population thought to be present), their exact status, and their exact location(s) on the vegetation map.

   The survey report shall contain a discussion of those rare, endangered, and threatened plant species expected in the project vicinity, results of search for them and, if not found, the reasons why not (i.e., soil type, season). Discuss the suitability of the habitat on the property for each such species and the probability of the property being used by it, particularly if the survey was done when the plants would not be identifiable. Discuss here the known growth requirements of the species, including required soil types, exposure, elevation, availability of water, etc., as well as the time when the species is identifiable. Confirm the identification of rare, endangered, or threatened plant species, by species diagnostic photography or by a written description. For each species identified, a Plant Verification Form must be completed and included in the final technical report (Attachment III). This report can also be sent to the California Natural Diversity Data Base, CDFG Planning Branch, 1416 Ninth Street, Room 1225, Sacramento, California 95814.

   If the survey was performed when rare, endangered, or threatened wildlife were not present but are known to or are likely to use the

project site, discuss the probable population levels and activities of such species on the property. Verify any unusual animal identifications.

(Locality information is available on local rare plant species at the San Diego Natural History Museum Herbarium and through the California Natural Diversity Data Base.)

5. Sensitive Habitats. Describe and plot (on at least one copy of a project map) any habitat recognized by a government agency or conservation or scientific group as being depleted, rare and/or endangered, or otherwise sensitive (Attachment IV). For each such habitat, present data indicating its size, exact location, and the degree of its disturbance. Also, indicate the relative value of the habitat on-site and its regional significance.

   Discuss any streambeds on the project site which would be modified and subject to the State Fish and Game Code, Section 1600 - 1603. Discuss the existing conditions, the project impacts, and any measures to reduce the impacts. Discuss impacts to any formally identified Critical Habitats of Endangered or Threatened Species.

F. Evaluation of Resources

(This can be incorporated into the discussion under E.4.) This discussion should include the biologic and conservation value of the important resources on the property as compared to adjacent, nearby areas in the region, or within the range of distribution of the resource. Species abundance, composition, diversity, reproduction, and other indicators or "biologic quality" on the property should be compared to similar habitats elsewhere. Evaluate the physical or biological features used by wildlife on the property and their relative importance.

All conclusions or statements should be referenced when appropriate.

G. Anticipated Project Impacts

1. Identify and direct impacts that would result from project implementation.

2. Discuss and evaluate indirect impacts anticipated on- and off-site as a result of project implementation.

3. Indicate the percentage (or acreage) of plant communities and habitats to be removed or modified by the proposed development or reasonably anticipated to be removed. Discuss likely subsequent impacts for phased and staged development, even though not a part of the project under consideration.

4. Indicate quantitatively, the anticipated loss of sensitive plant and animal populations or individuals. Also define, if possible, the local and regional significance of this loss.

5. Discuss cumulative biological impacts including known or perceived losses for the region.

6. Discuss the effects that detected pests or nuisance species may have on future project users or adjacent residents.

7. If the proposed project will disrupt the integrity or continuity of an important habitat, this should be discussed (i.e., disruption of an extensive riparian woodland).

H. Mitigation Measures

Discuss in detail any feasible mitigation measures which would reduce anticipated significant impacts to insignificant levels, and where practical, design alternatives.

Also, if it is known, indicate which mitigating measures are being proposed by the applicant and which are not. If a formal project plan has not been established, then recommendations and planning considerations should be provided in this section. Specific design of recommended mitigations should be indicated on at least one copy of the project map. Feasibility of the mitigating actions should be discussed.

I. Certification

Provide the names and qualifications of those participating in the field work and in the report preparation. (This may be provided separately and will be kept on file at the Planning Department.)

J. Qualifications

Persons preparing or responsible for biological technical reports should have the following qualifications:

1. Sufficient formal educational background in appropriate areas of study to understand local floral and faunal relationships.

2. Sufficient local field experience in identification of flora or fauna, particularly rare, endangered, and threatened species with some knowledge of their local and rangewide population status and trends.

3. Sufficient experience in habitat evaluation and predicting and quantifying environmental impacts.

EXHIBIT III GOES HERE

EXHIBIT IV

BIOLOGICALLY SENSITIVE HABITATS
IN SAN DIEGO COUNTY

A. Fresh, brackish, and salt water marshes.

B. Estuary, lagoon, lake, or other body of standing water.

C. Riparian woodlands.

D. Oak and/or conifer woodlands (including juniper and cypress and Torrey pines).

E. Mountain meadows.

F. Known nesting, breeding, feeding, and/or resting areas of rare, endangered, and threatened species.

G. Native grasslands.

H. Vernal pools.

I. Coastal strand.

J. Gabbro-derived soil types and coastal marine sandstone derived soil types (which are known to support numerous rare plant species).

K. Mountain peaks.

L. Coastal mixed chaparral occurring between Carlsbad and La Jolla.

M. Recognized Critical Habitats of endangered or threatened species as defined by the Endangered Species Act of 1973.

N. Environmental resources of Statewide critical concern.

O. Other associations and types which, in the opinion of the field investigator, constitute a sensitive habitat.

EXHIBIT I

ACCEPTABLE NAMING AUTHORITIES

Vegetation Communities

Bailey, L.II. & E.Z. 1976. Hortus Third. Cornel Univ. MacMillan Publ. Co. Inc. New York. 1290 pp.

Barbour, M.G. and J. Major (eds.) 1977 Terrestrial vegetation of California. Wiley Interscience, New York. 1002 pp.

Holland, V.L. 1977 Major plant communities of California. In: Native Plants, A Viable Option. Symp. Proc., Edited by R. Walters, M. McLeod, A.G. Myer, D. Rible, R.O. Baker, and F. Farwell. Calif. Native Plant Soc., Spec. Publ. No. 3.

Munz, P.A. and D.D. Keck 1959 A California flora. Univ. Calif. Press, Berkeley, 1681 pp.

Munz, P.A. and D.D. Keck 1949 California plant communities. El Aliso 2(1): 87-105

Munz, P.A. and D.D. Keck 1959 California plant communities. A supplement. El Aliso 2: 199-202

Thorne, R.F. 1976 The vascular plant communities of California., pp. 1-31. In: Plant communities of Southern California. Symp. Proc. held May 4, 1974 at Fullerton, California Edited by J. Latting. Calif. Native Plant Soc., Spec. Publ. No. 2.

Plants

Mason, H.L. 1957. A Flora of the Marshes of California. Univ. of Calif. Press, Berkeley, Calif. 878 pp.

Munz, P.A. 1974 A flora of Southern California, Univ. Calif. Press, Berkeley, 1086 pp.

Fishes

American Fisheries Society 1960 A list of common and scientific names of fishes from the United States and Canada. Amer. Fish Soc., Spec. Publc. No. 2, 102 pp.

Eddy, S. & J.C. Underhill. 1969. How to Know the Freshwater Fishes. Wm. C. Brown Co., Dubuque, Iowa 215 pp.

Moyle, P.B. 1977 Inland Fishes of California. Univ. Calif. Press, Berkeley.

EXHIBIT II

REFERENCES FOR SENSITIVE SPECIES

(CITED FOR INFORMATIONAL PURPOSES ONLY)

General

Greenwalt, L.A. 1979. List of endangered and threatened wildlife and plants. Federal Register 44(12): 3636-3654.

Botany

Cheatham, N.H. and J.R. Haller. 1975. An Annotated List of California Habitat Types, Univ. of Calif. Natural Land and Water Reserve System 82 pp. Berkeley, CA.

Greenwalt, L.A. 1976 Proposed list of endangered and threatened plant species. Federal Regist. 41(117): 24524-24572.

Smith, J.P. (ed.) 1980 Inventory of rare and endangered vascular plants of California. Calif. Native Plant. Soc. Spec. Publ. 2nd Ed., 115 pp.

Ripley, D.S. 1974 Report on endangered and threatened plant species of the United States. Smithson. Instut., Report to Congress of the U.S., Dec. 1974.

U.S.D.I. 1975 Threatened or endangered fauna or flora: Review of status of vascular plants and determination of "critical habitat". Fed. Regist. 40(55): 12691.

Invertebrates

Greenwalt, L.A. 1975 United States butterflies: Review of status. Fed. Regist. 40(55): 12691.

Amphibians and Reptiles

Ashton, R.E. (Comm. Chrm.) 1976 Endangered and threatened amphibians and reptiles in the United States. Soc. Study Amphib. and Reptiles, Herpet. Circular No. 5.

Bury, R.B. 1971 Status report on California's threatened amphibians and reptiles. Calif. Dept. Fish and Game, Inland Fisheries Admin. Report No. 72-2: 31 pp.

Stewart, J. 1971 Rare, endangered and depleted amphibians and reptiles of California. Herpetology 5(2): 29-35.

Birds

Arbib, R. 1977 The blue list for 1978 Amer. Birds 31(6): 1087-1096.

Herptiles

Stebbins, R.C. 1954 Amphibians and reptiles of Western North America. McGraw-Hill, New York. 536 pp.

Zweifel, R.G. (ed.) Catalog of American amphibians and reptiles. Soc. for Study of Amphib. and Rep. Periodic Series.

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Bond, S.I. 1977 An annotated list of the mammals of San Diego County, California. San Diego Soc. Nat. Hist., Trans. 18(14): 230-247.

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Jones, J.K., Jr., D.C. Carter, and H.H. Genoways 1975 Revised checklist of North American mammals north of Mexico. Texas Tech. Univ., Occ. Pap. No. 28:1-14.

General Topics

California Dept. Fish and Game 1976. At the crossroads 1976: A report on California's endangered and rare fish and wildlife, Sacramento, 101 pp.

Hood, L. (ed.) 1975 Inventory of California natural areas. Vol. 1. Calif. Nat.

Areas. Coord. Council, Sonoma.

ATTACHMENT E
AGREEMENT BETWEEN THE COUNTY, APPLICANT AND ENVIRONMENTAL CONSULTANT

An agreement shall be entered into by all parties prior to an environmental consultant initiating environmental studies that have been contracted for under a separate agreement between the applicant and the consultant regarding payment for the consultant's services, time scheduling, etc. The agreement to which the County is party shall be in a form satisfactory to County Counsel and a standard form circulated with this Attachment.

May 21, 1997

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